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With Pressure Spray

December 5, 1960

# RAILWAY AGE *weekly*

## Frisco Adopts New Yard Plan

Constant car control is key to  
cost savings, improved service

PROFESSOR'S VIEWPOINT:

## High Cost of "Fixed Ideas"

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The Teletype Model 28 tape reader and typing tape punch combine proved dependability of operation with a variety of features which help streamline data communications systems and save the time of attendant personnel.

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Typing Tape Punch



Tape Reader



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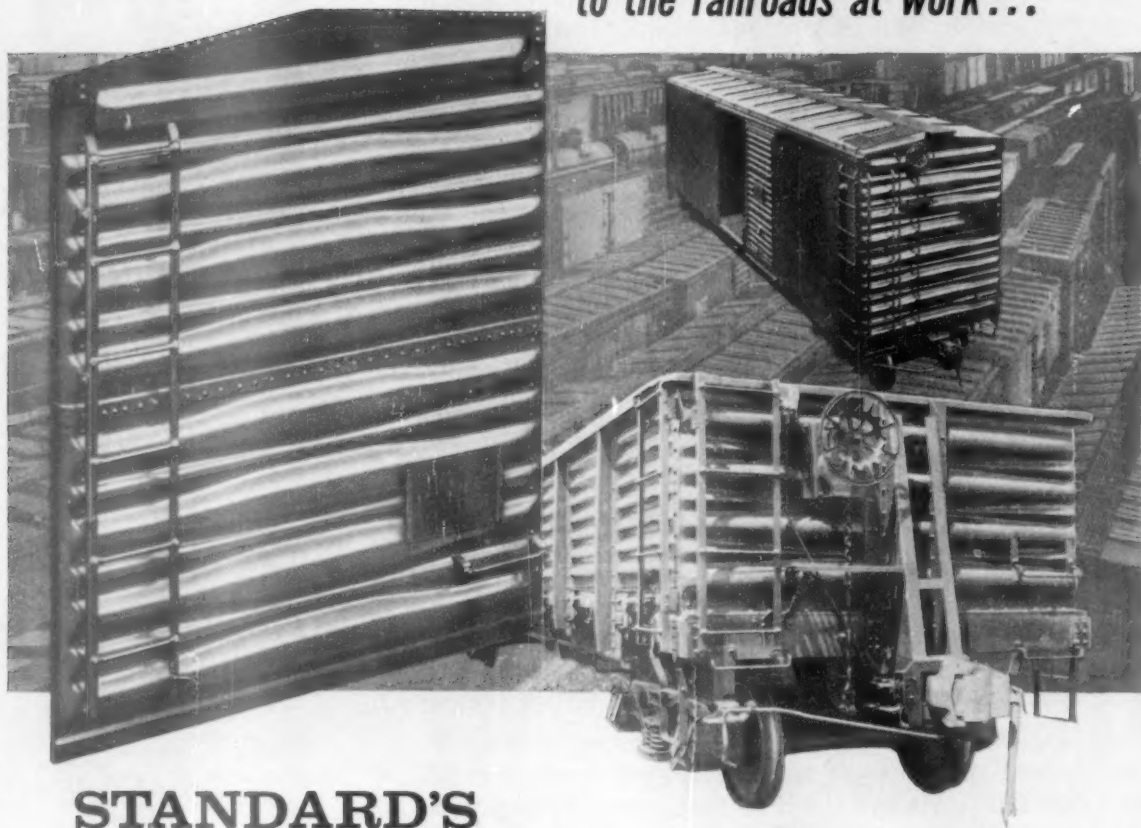


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Portrait by Editta Sherman



## Week at a Glance

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### N&W seeks NKP and Wabash .....p. 9

The proposed consolidation would create a 7,400-mile system operating in 14 states. Approval of stockholders and the ICC will be sought "at the earliest possible date."

### Red carpet down for visitors .....p.11

Returning a visit to Russia last summer by an American delegation, Soviet railroaders are touring U.S. rail installations armed with notebooks and cameras. Their tour winds up in Washington Dec. 19.

### Cover Story—Frisco adopts new yard plan .....p.14

The plan will improve service to shippers and receivers and will cut yearly terminal expenses by about \$500,000. It's based on a car-control system that is to be installed in all the road's major terminals by late spring of 1961.

### Cover Story—How NH cleans cars with pressure spray .....p.17

The new freight - car washing system, installed after 18 months of development work, cost \$25,000. With it, in non-freezing weather, the New Haven can clean 20 cars a day.

### Cover Story—The high cost of 'fixed ideas' .....p.22

What are the sociological barriers to technological change? This is one of the puzzling but important questions that will be explored next month at Northwestern University's three-day session on technological change and the future of the railways.

### RR competitors want 'legal monopoly' .....p.24

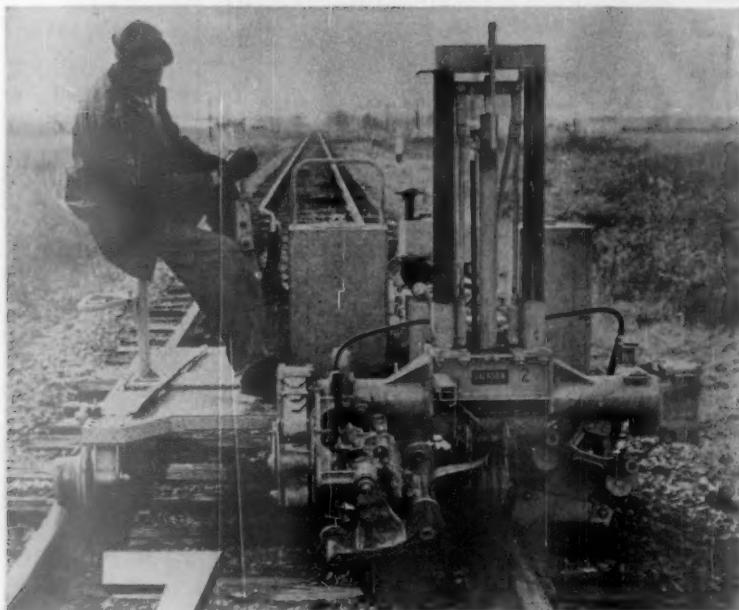
Special-privilege legislation which prevents railroads from diversifying should be repealed, says Clair M. Roddewig, president of the Association of Western Railways. Such diversification would meet the changing needs of commerce and industry, he adds.

### Dynamic pricing policies urged .....p.28

At an RSMA conference in Chicago, rail management was criticized for raising freight rates "instead of improving service and adopting a more realistic attitude towards pricing."

### C&NW hits subsidized transit .....p.32

Further competitive inroads by the Chicago Transit Authority may force the North Western out of the suburban business, says C&NW Chairman Ben W. Heineman. All Chicago



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## Week at a Glance

### Current Statistics

Operating revenues	
9 mos., 1960 ...	\$7,210,476,221
9 mos., 1959 ...	7,390,378,920
Operating expenses	
9 mos., 1960 ...	5,723,495,009
9 mos., 1959 ...	5,807,048,048
Taxes	
9 mos., 1960 ...	781,301,223
9 mos., 1959 ...	792,949,896
Net railway operating income	
9 mos., 1960 ...	432,951,018
9 mos., 1959 ...	547,919,151
Net income estimated	
9 mos., 1960 ...	303,000,000
9 mos., 1959 ...	393,000,000
Carloadings, revenue freight	
46 wks., 1960 ...	27,567,237
46 wks., 1959 ...	27,579,794
Freight cars on order	
Nov. 1, 1960 ...	22,900
Nov. 1, 1959 ...	36,199
Freight cars delivered	
10 mos., 1960 ...	48,316
10 mos., 1959 ...	32,063

### Advertising Sales Department

Duane C. Salisbury—director of sales  
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 WOrth 4-3060  
 J. S. Vresland—vice president;  
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 J. C. Lyddy—district manager  
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commuter lines, according to AWR President Roddewig, support the North Western's position.

### The Action Page—Is ad expense a waste? .....p.38

Railroads have invested heavily in advertising designed to increase public understanding of their problems. The campaign, helpful in many ways, should not be completely and indefinitely interrupted.

### Short and Significant

#### A scheduled railroad strike in Canada . . .

appeared averted as Parliament studied legislation ordering non-ops to remain at work until May 15, when the report of the Royal Commission on Transportation is expected. The strike had been set for Dec. 3 (RA, Nov. 21, p. 7).

#### PRR's 113-year record . . .

of paying dividends remains unbroken. Chairman J. M. Symes said the 25-cent dividend declared last week comes "in the face of an estimated loss for the year and is being paid out of earnings of prior years." PRR directors also restored salaried personnel to full pay, effective Jan. 1. Pay cuts ranging from 5% to 30% were made this fall.

#### Railroad dividend payments . . .

amounted to \$288.8 million in this year's first 10 months, compared with \$305.2 million for the corresponding 1959 period.

#### The Teamsters have declared war . . .

on piggybacking. President James Hoffa warns truck drivers that their jobs are threatened by the growth of TOFC, especially the piggybacking of private autos, and urges union members to complain to their congressmen and state legislators. He blames an "ICC-railroad combination" for the trend.

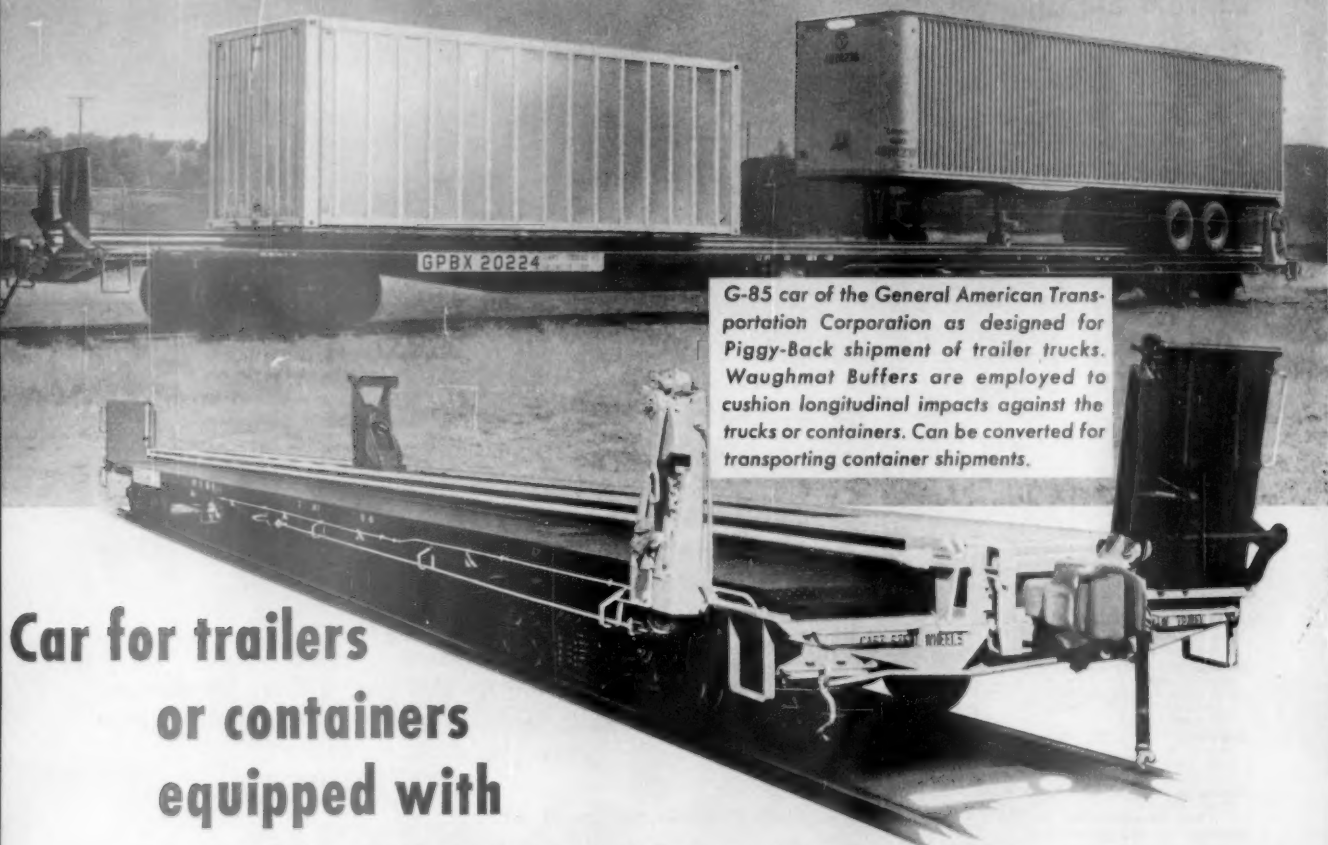
#### The present low level of freight traffic . . .

has caused the AAR's Car Service Division to suspend publication of its "National Transportation Situation." The publication, issued monthly at the request of regional shippers advisory boards, reported on car-supply conditions.

#### Fines totaling \$46,750 . . .

were paid during the three months ended with October by 37 railroads for violation of the Safety Appliance, Hours of Service, Accidents Reports and Signal Inspection Acts. Biggest payer, according to the ICC, was the New York Central, assessed \$4,750.

# DOUBLE DUTY



G-85 car of the General American Transportation Corporation as designed for Piggy-Back shipment of trailer trucks. Waughmat Buffers are employed to cushion longitudinal impacts against the trucks or containers. Can be converted for transporting container shipments.

**Car for trailers  
or containers  
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Here is a Piggy-Back Car that can do double duty . . . carry trailers or, with slight modification, carry containers. Either way, shock-force control Waughmat buffers provide exceptional lading protection.

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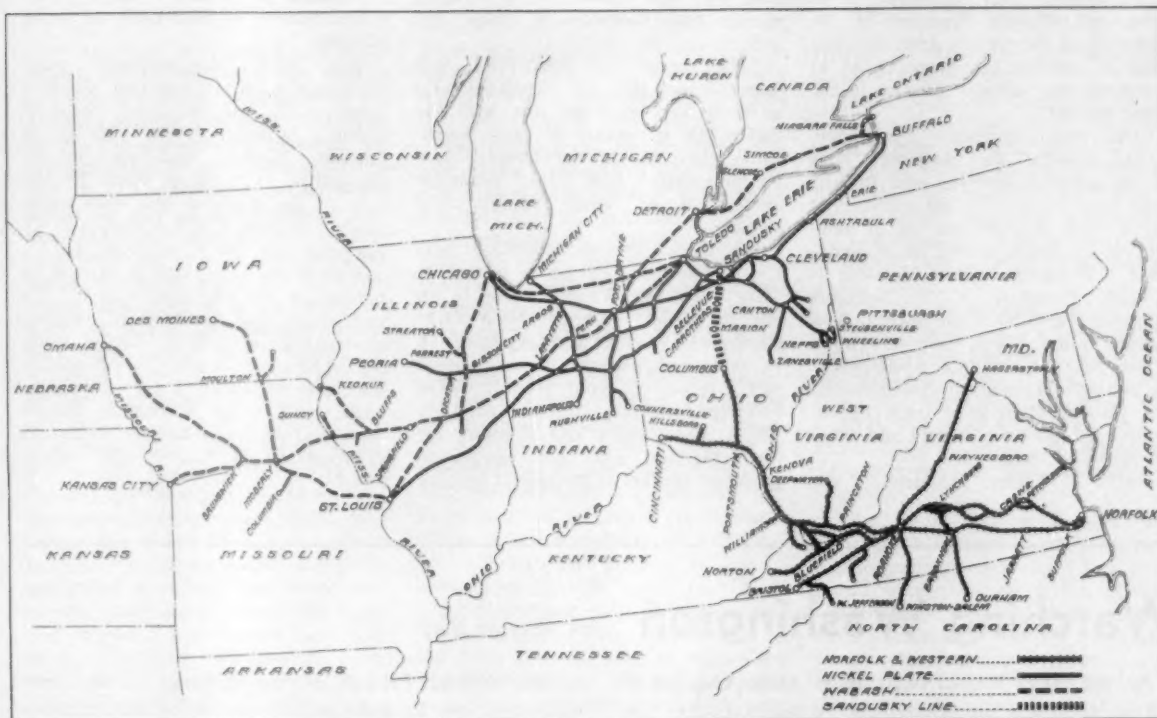
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## N&W Seeks NKP and Wabash

► **The Story at a Glance:** Norfolk & Western, Nickel Plate and Wabash have agreed on terms for a three-way consolidation that would create a 7,400-mile system with assets of \$1.7 billion.

The agreement contemplates:

- Merger of the Nickel Plate into the N&W under a stock exchange plan.

- Purchase of the Pennsylvania's 111-mile Sandusky line between Columbus, Ohio, and Sandusky for \$27 million cash to provide an N&W-NKP connection.

- Lease and eventual merger of the Wabash into the N&W.

Elsewhere on the merger front, Missouri Pacific has made a formal offer for Chicago & Eastern Illinois stock.

Norfolk & Western, which reached agreement with the Nickel Plate on merger terms last summer (RA, June 20, p. 9), has brought the Wabash into what is now a three-way consolidation picture. The plan will be presented "at the earliest possible date" to stockholders and the ICC.

Last week's announcement that all of the "companies involved" have agreed "in principle" on plans for the consolidation came one year to the day after N&W's merger with the Virginian became effective.

That merger created a 2,700-mile system. Acquisition of the Nickel Plate and the Wabash would turn N&W into a 7,400-mile system operating in 14 states. Combined assets would be about \$1.7 billion.

The "companies involved" in the present plans include the Pennsylvania. To achieve a connection with the NKP, N&W would purchase PRR's 111-mile, Columbus-Sandusky line for \$27 million cash. The purchase would include the Sandusky line's three coal piers on Lake Erie and supporting yards at Sandusky. PRR would retain trackage rights between Columbus and Carrothers—about 78 miles—and would pay for them on a user basis.

Outright merger of the NKP into N&W is planned. Terms involve exchange of one share of NKP common

stock—on a tax-free basis—for 0.45 share of N&W common.

N&W would lease the Wabash for 50 years, with an option to Wabash to exchange at any time after six years all of Wabash's common stock, totaling 598,186 shares, for 675,000 shares of N&W common. The exchange would become mandatory at the termination of the lease. (More than 99% of Wabash common is owned by the PRR.)

For the Wabash, N&W proposes to pay a net annual rental of \$7,125,000 for the first six years, with an increase based upon any rise in dividends in excess of \$5.00 a share on N&W common. From the seventh year, the rental would be an amount equal to the annual dividends on 675,000 shares of N&W common.

All Wabash subsidiaries except the Ann Arbor Railroad would be included in the arrangement. Also excluded would be Wabash's stock interest in the Detroit, Toledo & Ironton and the Lehigh Valley.

N&W estimates the three-way con-

solidation would bring savings of more than \$25 million annually following full integration.

In a joint statement, PRR Chairman J. M. Symes, NKP President F. S. Hales and Wabash President H. H. Pevler called the plan "a great step forward in meeting the urgent need to strengthen the railroad industry in the public interest."

"The plan represents wholesome, healthy growth," they declared, "both for the carriers involved and for the areas they serve. For the railroads it would result in expanded use of mileage, more efficient utilization of equipment, and greater volume of traffic."

N&W President S. T. Saunders pointed out that NKP and Wabash now operate routes which have 650 miles of parallel lines. Common points where the two lines maintain separate terminal and yard facilities offer great opportunities for more economical and efficient operation, he noted.

Walter J. Tuohy, president of the

Chesapeake & Ohio, said the N&W proposal is a "constructive and natural step in unification of eastern railroads and is forceful confirmation of C&O's own plan for affiliation and ensuing merger with Baltimore & Ohio." He added:

"The merger of N&W-NKP will join railroads that are complementary, as is in large part the case with the B&O-C&O. In neither of these worthwhile plans would the benefits flow predominantly from the wholesale elimination of jobs, facilities and services."

"Further, with the N&W-NKP, both strong railroads, merger is immediate while with the Wabash there is an interim period. Like the N&W-NKP, Chesapeake & Ohio is strong financially, with demonstrated earning power and a good dividends record. C&O's two-step plan originally approved by B&O's management and directors for first affiliation and then merger as proposed appears as the logical process."

"The N&W-NKP announcement should be given thoughtful attention by those interested in the B&O's future, primarily its shareholders who will decide in the next 14 days whether the benefits of B&O-C&O are to be achieved."

The N&W announcement overshadowed another important development on the merger scene—Missouri Pacific's proposal to the Chicago & Eastern Illinois, involving merger through an exchange of stock. No details of the proposal had been made public last week. C&EI President D. O. Mathews said "we're studying it . . . and we're not in position to express an opinion or to state what's in it." It's understood that the proposal involves an exchange of MoPac Class A stock for C&EI common and Class A shares. The offer reportedly hinges on agreement, by Chicago & Eastern Illinois bond- and debenture-holders, to certain modifications in senior debt indentures.

## Watching Washington *with Walter Taf:*

• **"READY, WILLING, ABLE AND ANXIOUS"** to give "thorough and sympathetic" consideration to railroad merger proposals is the present disposition of the ICC. That's what Commissioner Tuggle told the National Association of Railroad and Utilities Commissioners last week.

**THE COMMISSIONER THINKS** merger developments of the past year or so "hold promise for constructive and substantial advancements in this area within the near future." He also thinks there is now "sounder justification and more compelling reasons for the efficient unification of rail services than at any time in our transport history."

**MOREOVER**, Mr. Tuggle points out that the merger area is one in which the railroads can apply the principle of self-help with the blessing of Congress as well as the Commission. The history of the Interstate Commerce Act's consolidation provision makes it "abundantly clear" to the commissioner than Congressional policy is to encourage sound mergers.

**MEANWHILE**, however, Mr. Tuggle warns that considerations of public interest must be determining factors, the field being not one for "bulldozer thinking or action." He cites the N&W-Virginian and Erie-Lackawanna mergers and North Western's acquisition of the M&STL as transactions which met the public-interest test, because the combined properties "will produce stronger companies better able to meet the challenge now faced by the railroad industry."

**PRINCIPAL PHASE** of that challenge, as the commissioner sees it, is its call for action by the railroads to improve their competitive position by reducing costs and increasing efficiency. Mr. Tuggle finds much "duplication and waste" in the present set-up, and he considers mergers and coordinating arrangements among the "most promising" corrective measures that can be taken. He even suggests a new word—railification—to comprehend both of those methods "which are directed to the same good end."

• **THE 1961 CHAIRMAN OF ICC** will be Commissioner Everett Hutchinson. Under the Commission's plan of rotating its chairmanship annually, he will take over Jan. 1 as successor to Chairman John H. Winchell. Mr. Hutchinson has been a member of the Commission since 1955, and his present term runs until the end of 1965.

• **PRICES PAID BY RAILROADS** for fuel, materials and supplies have turned upward again. The AAR's latest quarterly index, at 143.5 halted a downtrend which had been under way since the first of the year. The index is for October, and it compares with July's 142.7, April's 143.5, January's 144.4, and October 1959's 143.2. The index is based on mid-year spot prices of the 1947-49 period as 100.

**HIGHER FUEL PRICES** accounted for the July-to-October increase in the index. The fuel-price index rose from 111.4 to 114.3. Except for a tenth of a point increase in that covering prices of miscellaneous products, all other product indexes declined.

# Red Carpet Down for Visitors

► **The Story at a Glance:** Ten Soviet railway officers, headed by the Russian minister of railroad transportation, are getting a detailed look at U.S. rail operations. The Russians are returning last summer's visit by an eight-man delegation of U.S. railroaders to the Soviet Union as part of a scientific, educational, technical and cultural exchange established last year by agreement between the United States and the Soviet Union (RA, Aug. 1, p. 9). Here's the story of where the Russian visitors have been, where they're going, the questions they are asking, and the answers they're getting.

At New York's Mott Haven Tower, Pittsburgh's Conway Yard, Chicago's Bensenville Yard and points between, Russian railroaders last week were asking and U.S. railroaders answering searching questions about day-to-day operations. A Soviet team of technical experts, well stocked with notebooks and cameras, was touring U.S. railroads. The tour will continue until Dec. 19.

The Soviet tour—conducted with the blessing of the State Department and under the auspices of the Association of American Railroads—follows by several months a similar tour of Russian railroads by American rail officers.

As part of a broad continuing program of exchange visits of scientists, technicians, educators and artists of the two countries, the American railroaders spent five weeks in Russia and put in 6,500 miles on Soviet trains. The eight-man American group, headed by C. D. Buford, vice president operations & maintenance of the AAR, returned with a wealth of information on Soviet practice (although they did not see everything they asked to see nor get answers to every question they asked).

Nevertheless, as one of the Americans put it, "While our Soviet hosts were quite restrained and at all times reticent, I must say that in all fairness they treated us with courtesy and with full diplomatic hospitality." The details of the present tour have been planned as payment in kind.

The Soviet railroaders' tour of the U.S. began Nov. 21 in Washington and will wind up in Washington Dec. 19. In between, the Russian visitors will have inspected rail facilities in Philadelphia, Wilmington, New York, Buffalo, Pittsburgh, Chicago, Memphis,

New Orleans, Jacksonville, St. Petersburg, and Richmond and will have traveled over some 4,250 miles of the U.S. rail network.

The Russians are not getting a once-over-lightly treatment. The AAR planned itinerary includes a comprehensive look at train operation and maintenance methods, push-button yards, electronic traffic control systems, car accounting and distribution, terminal facilities, passenger operations, and just about every other point of railroad interest.

At each point on the tour, the visitors are given a chance to look around and ask questions. Like any other railroader, the Russian version asks a lot of questions—and takes a lot of pictures. The questions tend to be detailed, and the translation process is cumbersome. (Most of the Russians speak little English, although they get a good deal of mileage out of "O.K.")

At New York Central's freight forwarder facilities under construction at the West 60th St. yard in New York City, for example, the Russians were particularly interested in the corrugated siding being installed. Another feature that drew comment was the large quantity of light available from a rela-

tively small number of translucent plastic panels in the roof.

The Russians are taking lots of pictures, not all of which are concerned with technical details. On a tour of New York Harbor aboard the PRR tug Pittsburgh, for instance, the Statue of Liberty (which came out in translation as "monument of freedom") was probably the favorite target in the camera sights.

Many of the questions concern differences in operating practices. Inspecting dispatching facilities, for example, the Russians asked several questions about the number system New York Central, like most U.S. roads, uses to record train movements. In Russia, the dispatcher records train movements on a graph.

There were lots of nuts-and-bolts questions. A transportation superintendent, for example, was asked how many people were employed on his division, how many supervisory people, how he hired a brakeman if one were needed, etc. An electrical power supervisor was asked about substations; a car service officer was asked to explain how he used each of several business machines in car accounting.

The Russian delegation includes rep-



POTOMAC YARD was one of the early stops on the Russian tour of U.S. railroads. Here AAR Vice President Curtis D. Buford (left) describes the yard operation to Mr. Aganov (second from left), Minister Beschev (center), translator Berdennikov (second from right) and Mr. Karpov (right) while the towerman continues to work.



representatives of a wide variety of railroad functions. Headed by B. Beschov, Minister of Railroad Transportation Enterprise, it includes: E. G. Agavonov, Transportation Engineer for the Central Scientific Research Institute of Railroads; V. F. Belov, Chief Engineer, Kolominsk Locomotive Construction Factories; Nikolai A. Berdennikov, Specialist in the State Scientific and Technical Committee; I. A. Ivanov, Director of the Central All-Union Scientific Research Institute, Moscow;

L. A. Karpov, Head of the Moscow Railroad Region; Vladimir Nazarov, Engineer for International Communications Administration, Ministry of Railroads; Boris S. Ryazantsev, Chief Engineer, Administration of Communications and Signals; K. S. Simonov, First Assistant to Chairman of Scientific and Technical Counsel, Ministry of Railroads; and Andrei I. Tischenko, Chief Main Administration, Locomotives, Ministry of Railroads.

The Russians are being accompanied

on various parts of their tour by some of the U.S. railroaders who visited Russia last summer. Along for the first part of the trip was AAR Vice President C. D. Buford and C&O Assistant to the Research Director Sergei G. Guins. Joining the tour at later stages are AAR Vice President W. M. Keller and Wabash Superintendent of Signals and Communications L. B. Yarbrough. A. E. Highland of the AAR Car Service Division is handling arrangements for the tour.

## Railroading



## After Hours with

*Jim Lyne*

**GRAY HAIR DEPARTMENT**—The President's Science Advisory Committee is properly concerned about the quality and quantity of this country's instruction and research in the physical sciences. Scores of educators, TV and press pundits and military leaders are continually exhorting on this subject—hence the likelihood that our shortcomings will be recognized and corrected.

What concerns me much more are the equally dangerous trends that nobody in the spotlight pays any attention to. For example—the continued dependence of the nation on economic railroad transportation, coupled with the unconcern of Washington with the conditions which are preventing railroads from going forward as they should, and even from holding their own.

Or take the amazing growth of our dependence upon central station power to keep our homes warm and supplied with food—at the very time when such central stations have become easy targets for enemy action.

We are, certainly, in as much danger from not acting sensibly about things we already know about, as we are from our lack of zeal in acquiring more knowledge. For instance, look at the disastrous decline in our gold reserves—a condition for which inflationary wage and price policies are largely responsible.

**ACL ART AT JAX**—Formica reproductions of a dozen locomotive types—from Isaac Newton's 1680 idea of a steam-jet-propelled job down to a modern diesel-electric—are a decorative feature on the second floor of ACL's new office building at Jacksonville. A neat little folder issued by Coast Line's press department reproduces the pictures.

Some day I may get around to cataloging the company-fostered art which railroads have supported; and I'd guess no other industry has as much to its credit in this area.

No industry has a livelier civic consciousness than railroads do—and, if they were earning the 12% or so that manufacturers do, on the average (instead of 3% or less), I'd expect a great burgeoning of railroad art, architecture, literature and song.

**LESS FRANK THAN COMMIES**—I see where a group of waterways associations has come out brazenly against establishment of any user charge whatever on inland waterways. These self-seekers assert that such tolls would "virtually wipe

out the inland waterway commerce of the nation"—a statement which, if true, condemns the entire waterway system as anti-economic. Because, if these waterways do not save more than enough expense to cover their cost, then they are *ipso facto* not economically justifiable.

Who is behind these waterway associations anyhow? You occasionally see the names of their paid officers, but whom do they represent? What business men pay their good money to propagate such anti-private-enterprise doctrines?

The commies, at least, are honest enough to admit that they intend to overthrow free and self-supporting enterprise. They frankly fly the hammer and sickle, not Old Glory, from their masts.

**INDIAN NAMES**—Trying to reflect faithfully in this corner the things that come to mind most frequently "After Hours"—I find it hard to stay away from names of places, i.e., towns and rivers, and their reflection in railroad proper names. Doc Robinson of the Coal Association, whose first job was with the former Hocking Valley (now part of the C&O), tells me the name of the river which gave that railroad its name is really the Hock-hocking.

Then there are the euphonious Indian names with some accent on the last syllable—e.g., Pembina, and Wichita, and Arkansas. I ran into a honey of such a name on my recent visit to Brazil—a big town on the Central of Brazil. Its name is Guaratinguetá. It took me a few minutes to learn to pronounce all the syllables, but it was worth the effort. Of course, some Indian names have more length than euphony.

**SERVICE TIME STANDARDS**—A big trucker (J. L. Tormey of Roadway Express) recently revealed to security analysts that his company has set up 36,000 different standards of elapsed time (shipper to consignee) for all shipment points it serves (varied as between TL and LTL and altered according to the day of the week the freight originates).

The company punches cards on a 25% sample of all its shipments—and then compiles a performance ratio, in relation to standard, for each point-to-point combination. Incentive compensation is provided for supervisory personnel with favorable performance ratios. Data thus collected not only serve as a spur to high-quality service, but afford valuable ammunition for sales forces.



## RAILROADS CALL JACK NILEST THEIR BEST FRIEND


In thirty years of serving railroads, Jack Nilest has made lots of friends. How? By having a sure knowledge of the railroad business and by having the petroleum products his railroad customers need *plus* the resources to get these products delivered where needed *on time*.

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From Standard's sales research department, Jack gets data on carloadings, steel and automotive production, grain shipment forecasts and a host of other pieces of information. These, together with his own extensive knowledge of the railroad business, help

him develop plans and immediate and long-range supply programs that mean the best possible service to the railroads.

Would you like to have Jack Nilest on your team? He's ready to serve you anywhere in the fifteen Midwest and Rocky Mountain states. Call him. Or write Railway Sales Department, **Standard Oil Company (Indiana)**, 910 South Michigan Avenue, Chicago 80, Illinois.

You expect more from  and you get it!



Good friend of railroaders is Jack Nilest, sales manager of Standard Oil's railway sales department. Jack has more than thirty years' experience serving railroad customers.

# How the Frisco's Car Control System Works

## FOR INBOUND LOADS:

**Yard clerk** produces punch cards from inbound consist tape, key punches industry track numbers into cards and runs switch list on IBM 402. Makes pull-by check of train. Verifies list against pull-by check and waybills.

"Switches" punch cards and bills into various slots in waybill box according to class yard tracks into which cars are switched (cards and bills stand in same order as cars).

**Car clerk** posts car initials and numbers in demurrage books, notifies consignee by phone and mails postal notices and construction notices when required.

**Yardmaster** calls car clerk for switch list when ready to pull industry cars from class yard for classifying by industrial zones in local yard.

**Car clerk** pulls punch cards from waybill box and prepares switch list on IBM 402. Sends list to yardmaster.

**Yardmaster** marks local yard track numbers by each car, gives two copies to switch crew, sends one copy back to car clerk, keeps one copy.

**Car clerk** files cards in local yard "Cardex" file by track number.

**Yardmaster** calls car clerk for list of cars in transfer cut and customer switching requests for industrial zone which will be switched next.

**Car clerk** prepares switch list on IBM 402 of all cars for that industrial zone. Sends two copies of list and Form 547 to yardmaster, keeps one copy of list and form (547 shows work to be done not included in switch list).

**Yardmaster** gives one copy of list and form to switch foreman.

**Car clerk** punches date set in each card, selects pre-punched card showing "set," "constructively placed," etc., and puts both cards in "Cardex" file by industry spot number.

Radios yardmaster about any additional switching instructions received for a zone after crew leaves to work that particular zone.

**Yardmaster** relays same instructions to foreman. Covers various industrial zones in radio-equipped automobile to see that crews perform work as instructed.

**Switch foreman** notifies yardmaster by radio of completion of work on switch list (with exceptions, if any). Also notifies YM of additional work not shown on list.

**Yardmaster** phones or radios car clerk of work done and exceptions, if any.

**Car clerk**, at 7 a.m., pulls all punch cards from "Cardex" file and, with proper header cards, prepares eight copies of yard check on IBM 402. Posts demurrage from yard check.

## Frisco Adopts New Yard Plan to

► **The Story at a Glance:** By late spring of 1961, the Frisco plans to have completed installation of its perpetual car location inventory and mechanized yard check program at all major terminals. The system is already in operation at Tulsa, Oklahoma City, Fort Worth, and Springfield, Mo. Preliminary work is under way at Kansas City, Mo.; and at Wichita.

First phase of the program in each terminal will be car control. Establishment of standards to provide quantity and quality control will come later.

The Frisco is moving ahead rapidly with application of new terminal procedures which should improve service to shippers and receivers and, at the same time, save the railroad about \$500,000

a year in terminal expenses.

The road's perpetual inventory and mechanized yard check system, patterned in part after the work done by Canadian Pacific, offers eight principal advantages:

- Reduced yard clerical expense.
- Improved service to customers by expediting spotting and pulling of cars.
- Reduced car detention.
- Improved switch engine performance.
- A more timely, accurate and legible yard check.
- Increased demurrage collections.
- Elimination of side-carding of cars.
- Elimination of on-the-ground car checks, except for occasional spot checks made by industrial yardmasters

operating from radio-equipped automobiles.

First installation of the system was made last April 25 at Tulsa, Okla. Similar applications at Fort Worth, Tex., Springfield, Mo., and Oklahoma City, Okla., followed. Eventually, Frisco will have the program operating at its remaining seven mechanized terminals and at a number of non-mechanized yards. Over the next six months, the system will be applied at Kansas City, Mo., St. Louis, Memphis, Tenn., and Birmingham, Ala., to wrap up installations at major terminals.

Basically, the program provides for:

- Establishing a control room in the yard office on a 24-hour basis for acceptance of customers' orders and instructions and maintenance of demur-

**Consignee** phones car clerk that car is unloaded and ready to be pulled, or that it will be reloaded.

**Car clerk** punches card showing car empty and substitutes it for "load" card in file. Notifies YM that car is ready to be pulled.

**Yardmaster** radios crew to pull car (if crew is not on duty, information is written on Form 547).

**Switch foreman** radios YM that car had been pulled.

**Yardmaster** notifies car clerk that car has been pulled.

**Car clerk** removes punch card from file and sends to head yard clerk for disposition of car when it arrives back in train yard.

**Yard clerk** checks cars arriving in cuts from industries and connections.

**Head yard clerk** checks cards against ground check to be sure all cars have been pulled.

**Car clerk—YM** check with each other at close of each shift on all work performed during shift.

#### FOR OUTBOUND LOADS:

**Shipper** phones car order to car clerk.

**Car clerk** writes car order on Form 547.

Locates suitable empty. If empty is in train yard, industry number is punched in car card, car is switched, switch list is prepared and car is spotted. If empty is in same industrial zone as shipper, clerk make notation on Form 547 and notifies yardmaster.

**Yardmaster** radios crew to pull empty from one industry and spot at another.

**Switch foreman** radios YM that work has been done.

**Yardmaster** notifies car clerk that empty has been spotted.

**Car clerk** pulls punch card from former industry slot, pulls pre-punched "set" card and files both in "Cardex" file by new industry number.

Posts car initial and number in demurrage book

Prepares 7 a.m. yard check.

Posts demurrage from yard check and checks bills and switch orders daily to make sure there is demurrage record on every car either billed out for Frisco roadhaul or delivered to connection.

**Shipper** phones car clerk that car has been loaded, gives routing instructions and takes bill of lading to freight house.

**Car clerk—YM** arrange to pull load and bring to train yard.

## Cut Costs and Improve Service

rage records and perpetual car inventory.

- Having a punched card in the yard office for each car in the terminal and moving the card to the appropriate index file by track number when the car is moved.

- Using these punched cards to prepare switch lists and the 7 a.m. yard check.

- Giving the industrial yardmaster a complete list of all work to be done by industrial switch crews.

- Comparing actual productivity for each switch engine with established work standards.

- Recognizing instances of poor car handling by comparing actual time to pull or set a car with standard time.

The last two procedures haven't been

implemented as yet—but it's Frisco's theory that initial service improvements and economies can be obtained in big terminals through installation of the car control system itself. The standards will be applied later.

Advance planning for an installation, Director of Industrial Engineering W. T. Bryan points out, calls for certain well-defined steps:

- The terminal should be divided into switching zones, and the tracks in each zone should be numbered in uniform, logical order. Frisco prepares and distributes lists showing industry names and industry track numbers, cross-indexed for ready reference.

- Shippers and receivers should be well-informed on the program's operation and the benefits that will be devel-

oped. Frisco has representatives of the traffic and transportation departments call on each industry. In addition, new phones are installed in the yard control room and cards listing these phone numbers are distributed to all patrons.

- Yard personnel should be trained to operate the system. Frisco develops custom-built procedures for each terminal, then holds training classes for yardmasters and clerical forces. Supervisors give on-the-ground training shortly after the system is installed.

Future installation at major yards will probably be done on a step-by-step basis—application of the industry-number system first, then inauguration of the mechanized yard check after yard forces become familiar with the physical numbering pattern.



# Six Roads to Teamwork

*Teamwork is a prerequisite to economical railroad operation. Railway Age recently reported comparison studies showing that work done by a skillfully cooperative hump crew cost up to 85% less per car than the same work done by an indifferent, uncooperative crew (RA, Aug. 15, p. 46). The November issue of the Pennsylvania's monthly supervisory news letter, The Personnel Manager, cites these studies—then goes on to suggest six guideposts for railroad supervisors who want to instill team spirit in the rank and file. The following is extracted from the PRR news letter:*

If you can pinpoint the reason or combinations of reasons that cause an employee to be less than cooperative, chances are, you can do something about it. Because the managerial success of every supervisor depends so much on the cooperation of his group, here is a guide that may be useful to you in developing cooperative team spirit in employee attitudes.

**1. Set the Goal.** The attitude "You do your job, I'll do mine" means that everyone is working his own objectives and cares little about group accomplishment. This disinterest in cooperation probably comes from a lack of understanding. It can be overcome if you make sure each employee has a clear knowledge of departmental goals and understands the sole reason his job exists is to reach those goals. Any good salesman knows that first you must establish a need before you can sell a customer. You underscore the need for cooperation when you make people see that solid achievement can only be secured when individual performance is meshed with total organizational performance. Don't forget this when you sell cooperation.

**2. Use the Personal Approach.** You don't have to be a psychologist to know there's a cause for uncooperative attitudes, so when cooperation breaks down, find out why.

Maybe the lone wolf who refuses to cooperate does so because he thinks people don't like him and holds back on giving help to show his resentment. Although it is not likely that you will change him to the point where he wins a popularity contest, your friendly encourage-

ment and recognition may work wonders in helping him fit into your team.

Perhaps the Alibi Ike who makes excuses for his failure to cooperate believes deep down he can't handle his job. He covers up by passing the buck and blaming others for his own mistakes. The answer may be special training that gives this kind of employee the skill he needs to do his job.

Probably the fellow who won't cooperate because he wants all the credit is insecure. Snap him out of it by making him see that he's not protecting his security by this attitude . . . but is actually undermining it.

Lack of cooperation is triggered by envy, the wish for personal recognition, misunderstanding, indifference, dislike, many other emotions. But you still hold the high card. In general, people prefer to cooperate, especially if they think of themselves as members of a winning team who receive credit for the team's achievements. It is your job to build this feeling.

**3. Hit Hard at the Star Complex.** Nobody's above cooperation if he's part of your organization. The late Knute Rockne taught this lesson to a star halfback whose head grew puffed from big headlines. One day, in practice, he ordered the first string line to move over to the second team, and handed the ball to his star with the order, "Okay, run with it." The star was stopped cold. "Try again," said Rockne as the halfback limped to his feet, "but this time show those fellows your press clippings. Maybe they don't know how good you are."

Many competent people demand cooperation as their right but don't give it. Cooperation is not a "sometime thing." The alert supervisor makes everyone see that if he wants cooperation he must give it.

**4. Stress Team Play.** Bob Yawkey learned some years ago when he acquired the Boston Red Sox and tried to build a championship team by buying the stars of other teams that cooperation doesn't come ready made. He got the stars, all right. But his players were so interested in protecting their high salaries by improving their personal records they forgot to cooperate. Result: The Red

Sox ranked first in everything but in league standing. Furthermore, Boston never won a championship until it got rid of some of its stars.

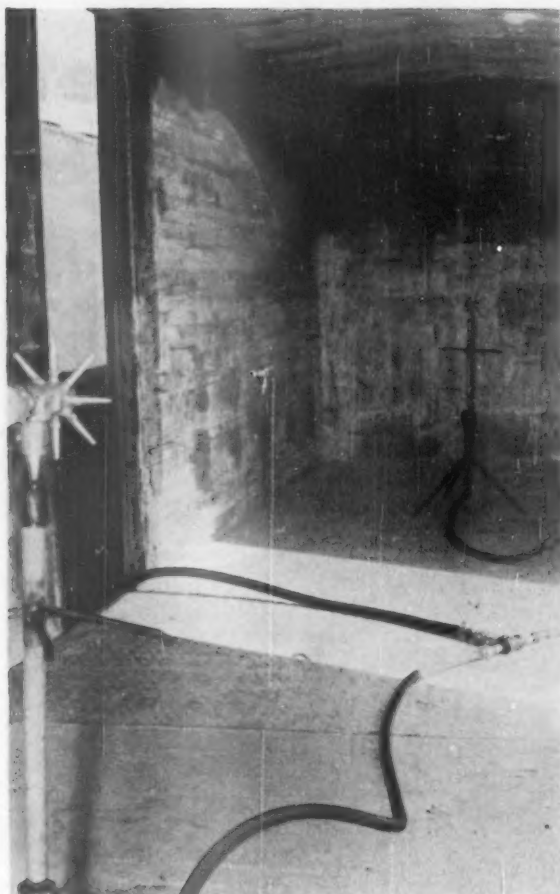
A disciplined organization is a well trained organization. Each member of the group knows his job and understands how it relates to other jobs. Cooperation is automatic. No matter how competent at his specialty an employee may be—if he fails to cooperate—group accomplishment is impossible.

**5. Communicate with Imagination.** Alert cooperation is based on fast-moving, two-way communications. Keep employees informed on all developments and the progress being made in reaching departmental goals. Listen to their ideas and suggestions. The best way to get cooperation is to build in people a sense of personal responsibility for the accomplishment of your objectives. To do that you must demonstrate why it is to their self-interest to help you reach your objectives. When your goals become employee goals, cooperation is assured. You have made employees responsible by encouraging them to participate, and developed helpers, not order-takers.

**6. Set a Good Example.** The attitude of employees is deeply influenced by your leadership. By working closely with supervision of other departments on mutual problems you set employee standards of cooperation. You also build cooperative team spirit by helping employees develop their abilities to the fullest—by keeping them filled in on matters that affect their jobs—by recognizing and praising good performance—by encouraging employee ideas—by showing a sincere interest in employee job problems—by listening sympathetically to employee complaints and adjusting them if they have merit—by maintaining fair, consistent discipline—by answering employee questions about departmental operations—by being a sound, all around leader.

Employees live up to your standards because they respect you and your ability. You have sold them by word and action that cooperation is another way of saying productivity; that productivity is the best way to run a campaign to protect railroad jobs.





**PIPE LINES** between the two cleaning tracks carry the high-pressure detergent and rinsing water to cars. The connections on these lines are spaced at 80-ft intervals. Cleaning tracks are tilted so cars will drain properly.

**SPRAY HEADS**, tripod-mounted, are placed in the two ends of New Haven box cars to give the interiors a thorough detergent cleaning. Road does 20 cars daily this way. Because of cold weather, the New Haven has suspended freight-car washing until next spring.

## New Haven Cleans Cars Fast

More Class A and Class B box cars are available for high-grade ladings on the New Haven since the road installed a high-pressure freight-car washing system.

The \$25,000 system was placed in service in the road's Cedar Hill yard (near New Haven, Conn.), after 18 months of development work.

Heart of the system is a Turco Dual-Jet washer which directs straight, high-impingement liquid streams against all interior surfaces of the car. Because of the high velocity of the streams, they can travel over 20 ft without bending or "feathering." It has been found that two Turco Dual-Jet washer heads mounted on tripod stands will effectively wash the interior of a 50-ft box car. A washing tripod is placed about midway between the door opening and each end of the car.

The NH has rebuilt its car-cleaning

tracks at Cedar Hill so the system can be employed. The two 1,200-ft tracks hold about 80 cars. The outer rail of each track is elevated approximately 3 in. Hence, the cleaning solution and water delivered inside a car during washing and rinsing will drain. The pump house at one end of the pair of tracks contains a mixing vat for the Turco Jet 1 cleaner which is used. The washing solution and clear rinse water are delivered in two pipe lines which run down the space between the two cleanout tracks.

First, hoses from the tripods are connected to the snap-on fitting on the cleaning solution line. Approximately 200 gallons of the solution is sprayed throughout the interior of the car at 240 psi pressure.

A typical cleaning cycle calls for washing for about 2 min, followed by rinsing with 240 psi clean water for 3

min. The time cycles may be varied, depending upon the car's condition.

After mechanical washing of the interior, the floor of the car is hosed down. This removes debris which may not have been flushed out of the doorway during the high-pressure washing. Doors, closed during the high-pressure washing, may require additional cleaning along the edges.

It takes from 7 to 10 min to wash a car. However, the changing of equipment and other operations restrict the output to about 20 cars per day on the New Haven, although it is possible to clean 35 cars under ideal conditions. Only cars which can be classified as A or B are washed.

It is not planned to install any drying facilities. Because ice forms in car interiors during freezing weather, the New Haven has suspended its car washing until spring.

Performance Proof No. 126

# P-S Compartmentizer for Old Forester —

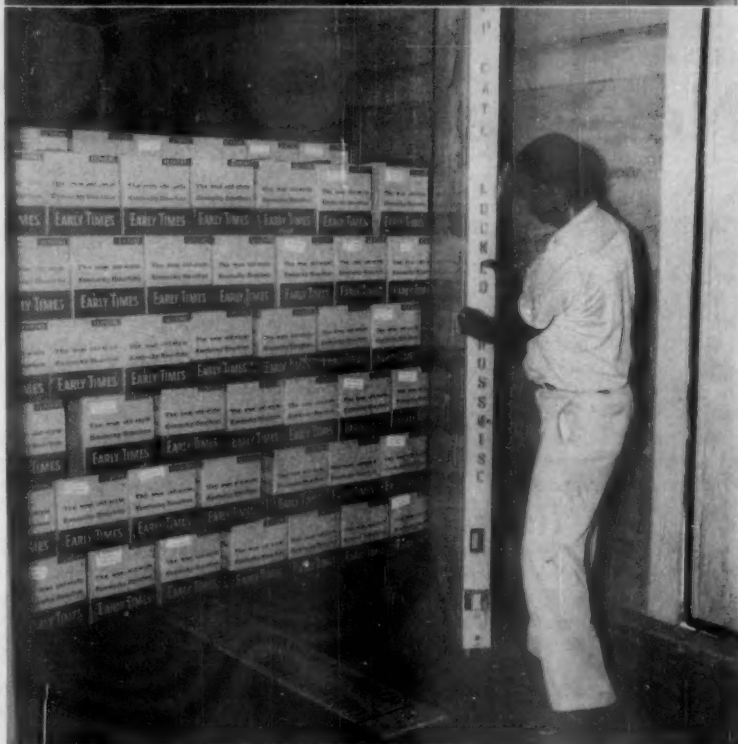
**LOADING AT LOUISVILLE**—After loading both A and B-ends of the car, 670 cases are placed in the area between the locked Compartmentizer gates. Recessed locking handles and smooth side wall lining eliminate the need for fibreboard buffers between the Compartmentizer and the load.

**Below**—With 476 cases of Early Times loaded in the B-end, the Compartmentizer gates are easily swung crosswise against the load face and the rack and pinion operating locks quickly engaged in the ceiling and floor keepers.



**UNLOADING IN MIAMI**—500 cases of Old Forester Christmas Decanters were included in the Brown-Forman shipment. These decanter cases, like the rest of the load, are removed at the McKesson & Robbins warehouse in 100% perfect, claim-free condition.

**At Right**—One man easily unlocks the Compartmentizer and swings the gates away from the face of the load. Note, that after traveling over 1670 miles, the load secured behind the B-end gates has not shifted or moved, thanks to the complete protection afforded by the all-steel Compartmentizer.



# Requested First Early Times shipment

"I always try to ship Compartmentizer first on all long haul shipments," says Wayne S. Franklin, General Traffic Manager of Brown-Forman Distillers Corporation.



A high rated commodity such as liquor is always an expensive item to ship . . . especially when part of the shipment is specially wrapped Christmas gift packages and glass decanters. For this reason, the Brown-Forman Distillers Corporation, Louisville, Kentucky, requested a Compartmentizer-equipped box car first for their shipment of 1,650 mixed size cases of Old Forester and Early Times to the McKesson & Robbins Wholesale Liquor Division warehouse in Miami.

An insulated Chesapeake & Ohio Compartmentizer-equipped box car was loaded with 28,800 bottles of aged Kentucky bourbon, including 6,000 special Christmas decanters. On arrival in Miami, after traveling 1,670 miles over the C&O, ACL, and FEC, the load was found in 100% perfect, claim-free condition.

In this particular Brown-Forman shipment, the car was divided into three compartments with 504 cases of liquor secured behind the Compartmentizer gates in the A-end of the car and 476 cases behind the gates in the B-end. The remaining 670 cases were placed in the doorway area. As Mr. Franklin said, "This arrangement is very beneficial in not only preventing mix-up of the load in transit, but also for separating the load in our stop-off shipments."

Shippers are finding the Compartmentizer the perfect answer to shipping damage-susceptible products claim-free. An increasing number of America's railroads are equipping standard box, insulated box, and refrigerator cars with this damage prevention device. Why not arrange a test load with your traffic representative the next time you make that crucial shipment?



**PLENTY OF ROOM**—Electric lift trucks, roller-type conveyor belts or hand operated pallet trucks have room to spare in Compartmentizer-equipped cars. Gates open flat against the car sides and, in some models, can be swung outside the car doorway to further speed loading or unloading.



**P-S COMPARTMENTIZERS** have been installed in a variety of freight equipment. Straight, insulated or refrigerated box cars equipped with Compartmentizers are now in service. C&O Compartmentizer-equipped car No. 7822 protected this shipment.

## ASK FOR THEM BY NAME . . . COMPARTMENTIZER-EQUIPPED BOX CARS

The following shipper-conscious carriers now have P-S Compartmentizer Cars in operation:

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Baltimore & Ohio	Norfolk & Western
Bangor & Aroostook	North American Car Corp.
Central of Georgia	Northern Pacific
Chesapeake & Ohio	Pacific Fruit Express
Chicago, Burlington & Quincy	Pennsylvania
Chicago Great Western	St. Louis Southwestern
Chicago & North Western	Seaboard Air Line
Fruit Growers Express	Southern Pacific
Great Northern	Texas & Pacific
Merchants Despatch Transportation	Transport Leasing Company
Milwaukee Road	Union Pacific
Minneapolis & St. Louis	Western Pacific

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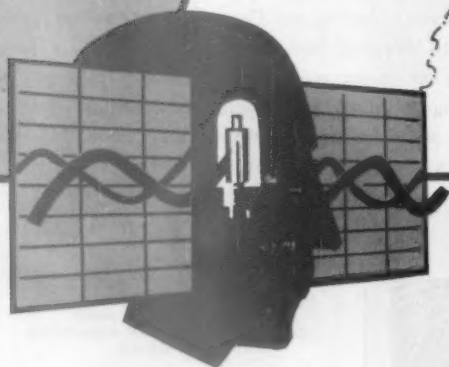
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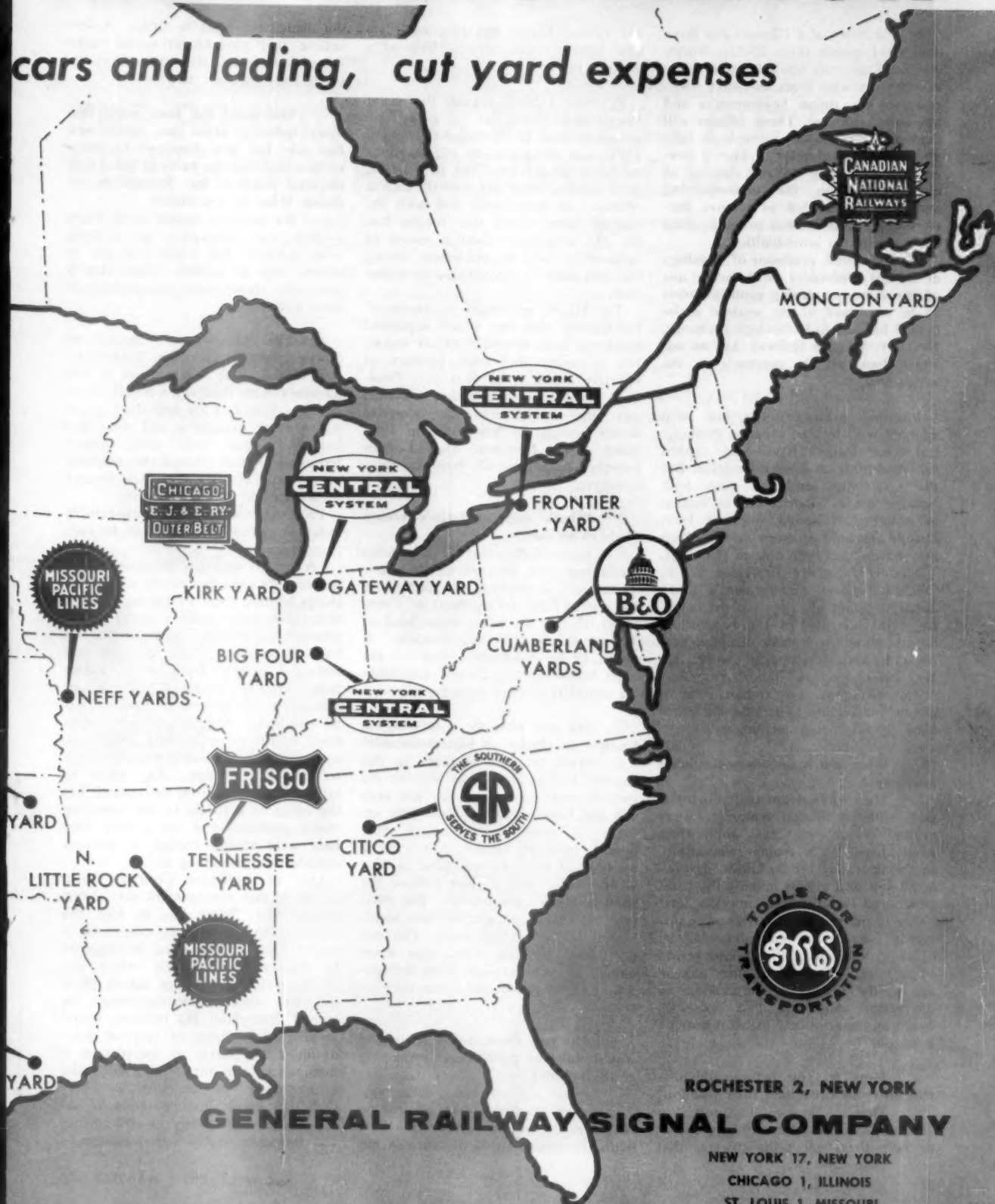
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# 'Fixed Ideas' Block Progress

► **The Story at a Glance:** For three days next month (Jan. 23-25), Northwestern University has scheduled a session for top men from executive suite, research lab, union headquarters and university campus. These officers will explore the future of railroads in light of advancing technology. They'll concentrate especially on the element of change—and on the understanding and planning needed to remove barriers which tend to stop progress short of its maximum potentialities.

W. F. Cottrell, professor of sociology at Miami University, will tackle one of the more perplexing problem areas to be examined at the session: sociological barriers to technological change. Recently, he gave *Railway Age* an advance look at his approach to the assignment.

Railroad management has been charged with lack of creative thinking; rail labor leaders have been rapped for attempting to hinder progress. But the sociologist tends to view both groups not as culprits but as victims of patterns of action, imposed from outside and built up from within, which they haven't yet been able to shake off.

Miami University Professor W. F. Cottrell believes management's traditional aloofness has deprived the industry, until recently, of the benefits of outside thinking, outside technological research and development work. He also looks upon rail labor's organizational structure as archaic, "completely inadequate to handle the problems of advancing technology."

Q. What are labor's organizational handicaps?

A. They suffer from craft organization, with its limited seniority rosters around which the men build their whole lives. It's a feudal relationship. In the operating brotherhoods, particularly, you find a man making the complete and absolute assumption that "This is my niche." Resistance is primarily a matter of maintaining a way of living developed during a long period of service. Remember, the median age in the operating brotherhoods is 59 years. And you find resistance based on the attitude "just so it lasts till I get out."

Q. How do you believe unionists will move to strengthen their position?

A. They're looking around for allies. They're shooting for any means to help them get rules changes that

will protect them. But they can't get new rules without political help of a strong sort.

Professor Cottrell regards the recent Pennsylvania strike as "a miracle"—mainly because of the support given the TWU and other non-op organizations by the running crafts. But, he believes, these unions "must demonstrate they're prepared to make their bed with the rest of labor"—and that means that the old aristocracy-of-labor image of themselves (held by old-timers among the ops) must be encouraged to wither away.

The Miami sociologist is convinced, incidentally, that two widely separated incidents have forced railroad unionists to realize they can't conduct an effective strike. The first was President Truman's seizure action a decade ago; the second was the powerful forces brought to bear early in 1959 when AAR President Dan Loomis launched management's drive for rules updating.

Q. What's railroad labor's course likely to be now?

A. Increasingly, they're associating themselves with the rest of the labor movement—depending, of course, on the rest of labor taking them in. Eventually, there's got to be some kind of "industrial union" organization. It seems to be a situation now of the older heads resisting change, defending the ramparts of craft unionism.

Q. Do you view these sociological barriers to change as insurmountable?

A. Well, the general thesis in this country is that technology will set the pace no matter what you do—and man will just have to give ground. But actually, it involves sociological, economic, political factors, too. It's a question of who can use what to beat whom with. No, I don't believe the barriers are insurmountable. But planning must take into account these sociological barriers. You know, you can get into a position where you waste almost all your savings from technology in costly union and community resistance.

Q. Do you think union leadership would welcome government ownership of the industry?

A. Most leaders now say "No." They seem to be afraid of getting caught as the postal workers are. Particularly, they're afraid of officially be-

ing denied the right to strike. A few believe that government would make railroads more effective competitors for traffic than they are now.

Q. The point has been made that other industry often can retain and find jobs for men displaced by automation, but that the railroad labor cost situation requires that payrolls be reduced. What do you think?

A. It's possible, among some crafts—clerks and telegraphers, for example—to re-train. But when you get to others, such as carmen, whose skill is not easily transferable, the problem is more difficult.

Franklin M. Kreml, director of Northwestern University's Transportation Center, who was present at the interview with Professor Cottrell, pointed out: "Transfers are best done where you have an expanding and diversified industry." But, both men agreed, fences were built around the railroads in the past century and they haven't been breached to any extent yet.

Professor Cottrell sees management today as partially a victim of its own past practices.

"A person who sits in universities," he notes, "knows that people who know things learned them by talking to each other. But there's been a sort of inbred relationship among railroads. They've had no feedback from scientists and technical people from other industries. They've found it difficult, or impossible, to recruit university people—railroad policies of promotion from within haven't helped. Then, too, operating personnel have acted to block technological change. Any effort to introduce change from the outside has the effect of a threat to the operating man's position—and for a long time they were strong enough to prevent outsiders from coming in."

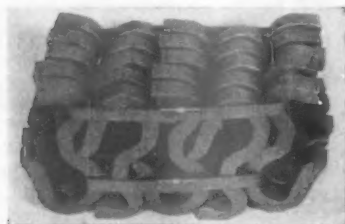
One of Professor Cottrell's basic points is that management acts, labor reacts; that "labor has to face the situation management confronts it with." Thus, change must be triggered by management before labor can change. He sees change taking place in some areas of management. Its spread throughout the industry would involve a retraining of railroad management or "purely as speculation, a dominance from outside that will make change come. In this, industries where there's a good deal of technological competence would buy in and control and introduce technological change."



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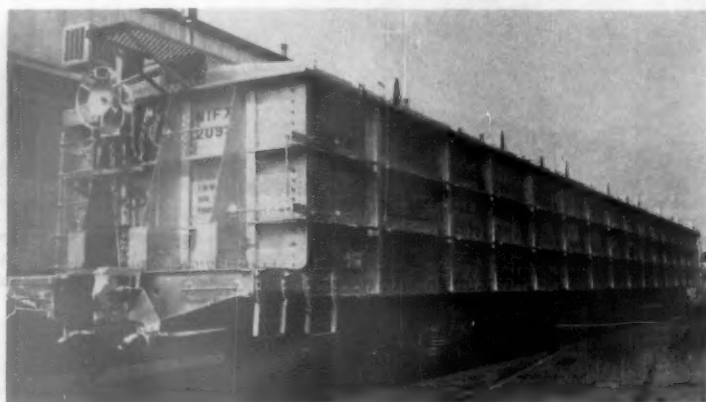


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### Covered Gondola Has All-Aluminum Body

Covered gondola with an all-aluminum body 85 ft long has been developed for weatherproof shipment of long loads, such as structural shapes. The experimental unit was developed by Harvey Aluminum in cooperation with the Rock Island and North American Car Corp. A successful coast-to-coast run has already been completed. The all-aluminum body is composed of six aluminum extrusions 82 ft long and 25 in.

wide. Three of these channel sections are stacked longitudinally and mechanically joined to form each side. For the roof, panel-type aluminum extrusions were fabricated into four 20-ft sections. Light weight of completed car with aluminum body is 75,900 lb. Weight of the aluminum superstructure is under 10,000 lb. Load limit is 134,100 lb, and capacity is 3,240 cu ft. Car is under lease to Rock Island from North American.

## Railroad Competitors Want 'Legal Monopoly'—Roddewig

The overriding public interest demands repeal of special-privilege legislation which bars the railroads from diversifying, AWR President Clair M. Roddewig asserted in San Francisco.

Opposition of "entrenched interests" is to be expected, he noted, "but their selfishness cannot be permitted to deprive the public of the benefits that will flow from common ownership."

Transportation diversification, Mr. Roddewig declared, is not proposed "as a cure-all for all the nation's transportation problems, nor even as a cure-all for all the problems of the railroad industry. What we do suggest is that [it] is a dynamic and positive step in the direction of strengthening the common carrier system so as to meet the changing needs of commerce and industry."

The AWR president reminded members of the San Francisco Region Chapter of the Association of Interstate Commerce Commission Practitioners

that diversification-minded roads—specifically Illinois Central-Southern Pacific in their bid to acquire control of a barge line—are facing stiff opposition, not only from other barge lines but also from highway and air transport interests.

Apparently, he charged, competing modes have "ganged up in an effort . . . to keep the railroads in a regulatory strait-jacket. . . . About all that can be concluded is that they have a deal under which . . . you protect our monopoly in our field of transportation, and we'll protect yours. In this way they work together so that they can preserve the legal monopoly each of these forms of transport holds through regulatory policies as they are interpreted and administered today."

Mr. Roddewig stressed benefits to the public which diversification could produce—benefits which, he said, can't be obtained through mere transport coordination without common owner-

ship. He cited remarks made recently by A. G. Anderson, general traffic manager of Socony Mobil Oil Company: "I'm still strong for common ownership which, among other things, can help the railroads to participate in traffic which is off-track. Common ownership would permit them to use any combination of truck, water and rail to the best advantage. Many people say this is already available to the railroads through coordination, but I am firmly convinced this is wishful thinking. Unless the several modes of transportation are under common control and management, there will certainly be no voluntary effort to provide coordinated services in the shippers' interest."

To claim that there are workable alternatives to intermode ownership, Mr. Roddewig said, "is to dwell on theory and not on reality." Through routes and joint rates between railroads and motor carriers "have not developed," he declared, "and the idea has not proved attractive to those who use transportation, or to most of those in the business of furnishing it."

It is particularly illogical for the trucking industry to propose such alternatives now, he said, since the motor carriers are "consistently opposing most of the aspects of TOFC service—a major development in transport coordination in recent years."

The history of restrictive common ownership legislation, Mr. Roddewig noted, shows that it was pushed not by the ICC but by pleaders for the trucking companies, the waterway interests and the airlines.

These restrictions, he concluded, "were originally special privilege legislation and their perpetuation throughout ensuing years has been for the benefit of these same special interests—at the expense of public interest."

"Now, however, times have changed. Conditions have changed. The infant industries have grown to maturity. Some have grown considerably beyond the maturity to which their inherent advantages would have taken them. The overriding public interest will be served by the repeal of these special privileges which have long since outlived their purpose."

Mr. Roddewig defended the railroad case for diversification—and charged that a number of statements made by its opponents "obviously are made for the sole purpose of throwing up a smoke-screen to conceal and obscure the facts." He denied that the rails' proposal involves any change in the minimum or maximum rate powers of the ICC and other regulatory agencies or that it contemplates any change in the anti-trust laws as implied by some diversification opponents.



# It's Easy to Call D. C. Station

No one who telephones Washington's Union Station for information or train-travel reservations now has to wait more than 20 seconds before his call is answered. He'll perhaps get all the service he wants from one station employee, and he'll seldom have to talk with more than two.

That's what a new Automatic Call Distributing System and other innovations have done in a busy terminal where, in former days, a caller could wait up to 45 minutes for a telephone response—and then talk with as many as five station employees. Such waits and "run-arounds," of course, were exceptional—but they did occur, according to complaints which came to M. H. Lingenfelter, manager of the Washington Terminal Company, which operates the station.

October was the first month of the new system's operation. And it was the first month in which Mr. Lingenfelter (who's been at the station more than four years) received no complaint about the information and reservation bureaus. Information and reservation calls average 3-4,000 each weekday, 5-6,000 daily on week-ends, and 10-12,000 daily during holiday periods.

The whole improvement involved rearrangement of facilities, air-conditioning the space occupied by the bureaus and adjacent ticket office, and use of printers (Ticketeers) to issue most of the tickets sold. All of this cost \$35,500, including about \$2,900 for installation of the new telephone equipment.

The greatly improved service has been accompanied by an annual saving in operating expenses of about \$13,600, even though the telephone bill went up nearly \$600 a month. The annual return on investment is thus more than 38%. The savings came because the new set-up provides the employees more pleasant surroundings, other improved working conditions and modern equipment, a layout which permits them to work with maximum efficiency.

Key piece of equipment is the automatic call distributor. This is a relatively new telephone device, the Terminal Company's installation having been among the first in the country. Equipment previously available to do a similar job would have been so costly as to make it uneconomical for the Washington station.

Three of the distributors have now been installed. They are rented from the telephone company, in this case Chesapeake & Potomac. One handles calls

seeking information and the others handle calls for space reservations on trains of the Terminal Company's five tenant railroads and their connections. The bureaus have their own phone-number listings for calls which go through the distributors. These information and reservation calls formerly went through the Terminal's general-office switchboard.

Each distributor provides a crossbar switching system. It is packaged in a sound-proof metal cabinet, only 27 in. by 33 in. and weighing approximately 1,000 lb. It distributes incoming calls to information and reservation clerks.

On each of the distribution boards are white lights to indicate operators available to receive calls, green lights to indicate operators in contact with callers, and red lights to indicate calls waiting to be answered. All of this information is immediately available to the supervisor, who has a model board on which the lights are also flashed. Thus, the supervisor can do a prompt call-dispatching job, moving waiting clerks to lines calling for help.

Then there is a recorded-announcement feature. This comes into play if a red light is not cleared in 20 seconds. The announcement advises the caller that all clerks are busy and assures him that his inquiry will be handled in turn. This message is repeated at half-

minute intervals until a clerk is available.

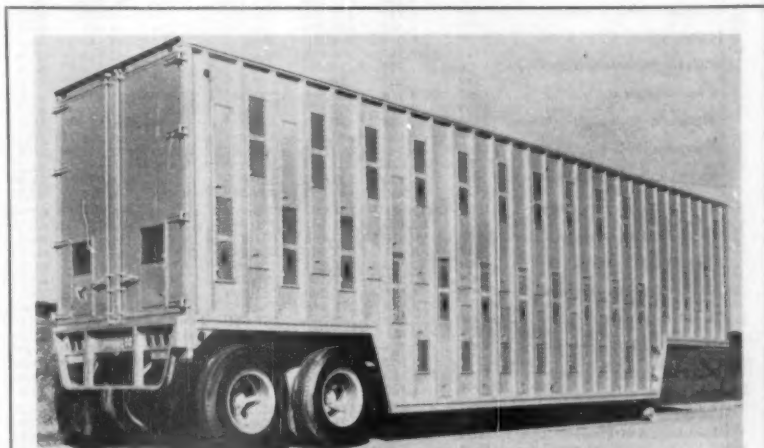
Checks indicate that practically no calls are held in excess of 2½ to 3 minutes, even in the busiest periods. The recorder may also be used for other announcements—for example, to advise callers of line trouble and to give them another number to call for service.

Other features of the system are those which provide counts of lost calls and of the number of calls handled by each clerk. The distribution of calls to available clerks is automatic.

The rearrangement of the facilities placed the information and reservation bureaus side-by-side. They were formerly on separate floors, so an information clerk had to transfer the call of an inquirer who wanted to follow through immediately and make a reservation. Now an information clerk can keep such a call on his own line, step over to the reservation bureau and get the customer his space.

That's been a major factor in cutting down the number of call transfers. Meanwhile, the Ticketeers have speeded ticket sales to the point where there is seldom a queue at any of the windows.

In the station, Mr. Lingenfelter has a favorite spot to which he goes frequently for a manager's-eye view of the whole operation. He likes what he sees these days.



## New Trailer Hauls Livestock, Dry Cargo

"Converta-Van," a multi-purpose 40-ft "possum-belly" trailer, can be used for either livestock or dry cargo in over-the-road or piggyback service. Developed by Highway

Trailer Industries, of New York, it features smooth sidewalls, air vents with individual weatherproof covers, and a possible multi-level floor arrangement.

# Freight Operating Statistics of Large Railroads—Selected Items

Region, Road and Year	New Eng. Region	Great Lakes Region	Central Eastern Region	Pocomtias Region	Southern Region	Northwestern Region	Central Western Region	Southwestern Region	Locomotive Miles		Car Miles		Ton-miles (thousands)		Road-locs. on lines					
									Miles of road operated	Train miles	Principal and helper		Loaded (thousands)	Per cent loaded	Gross excl. locos & tenders	Net rev. and non-rev.	Servicable		B.O.	Per cent B.O.
											Light						Unstored	Stored		
Boston & Maine.....	1960	1,549	209,965	210,245	2,978	7,088	61.7	515,806	213,869	70	3	15	17.0							
1959	1,559	203,025	203,276	3,517	7,293	63.1	506,426	208,580	80	4	25	22.9								
N. Y., N. H. & Hartfd.....	1960	1,719	224,465	224,465	11,790	8,301	62.4	563,088	226,264	61	1	12	16.4							
1959	1,739	236,123	236,123	13,767	8,853	64.8	578,861	236,617	60	1	11	15.5								
Delaware & Hudson.....	1960	763	154,423	155,099	766	6,905	63.3	499,421	250,868	36	2	11	22.4							
1959	764	135,421	136,132	711	7,089	64.7	499,280	247,347	29	8	4	9.8								
Del., Lack. & Western.....	1960	1,114	181,909	184,068	8,426	8,159	63.6	627,882	260,243	51	1	10	16.1							
1959	918	206,296	210,965	9,128	8,971	64.3	614,236	251,543	56	2	4	6.5								
Erie.....	1960	2,239	504,627	506,461	10,048	26,297	67.9	1,674,294	651,250	158	9	7	4.0							
1959	2,233	502,992	505,253	14,387	26,355	67.8	1,637,304	617,965	171	4	2	2.3								
Grand Trunk Western.....	1960	951	184,021	184,107	945	4,988	56.3	378,609	151,283	38	8	2	4.2							
1959	951	192,768	193,169	1,028	5,652	57.8	414,689	164,568	42	5	21	30.9								
Lehigh Valley.....	1960	1,114	178,421	178,464	3,375	7,721	64.7	538,419	246,348	31	1	3	6.8							
1959	1,114	181,909	184,068	8,426	8,159	63.6	627,882	260,243	51	1	10	16.1								
New York Central.....	1960	10,326	1,868,159	1,882,645	86,517	77,309	57.9	6,204,746	2,693,170	432	21	60	11.7							
1959	10,333	1,763,288	1,773,276	73,927	74,035	58.2	5,679,432	2,348,341	402	1	56	12.2								
New York, Chic. & St. L.....	1960	2,155	577,676	577,676	4,636	25,189	61.4	1,893,764	827,670	107	4	1	9.9							
1959	2,155	510,939	510,939	4,022	22,678	62.2	1,603,939	663,372	96	34	8	5.8								
Pitts. & Lake Erie.....	1960	220	42,585	42,585	1,942	64.2	185,613	112,906	15	11	3	12.5								
1959	221	22,704	22,704	1,942	64.2	185,613	112,906	15	11	3	12.5									
Wabash.....	1960	2,400	375,416	375,891	3,550	18,040	63.4	1,303,448	534,563	113	1	5	4.3							
1959	2,379	397,026	397,360	4,144	18,364	63.4	1,273,442	511,481	112	1	5	4.3								
Baltimore & Ohio.....	1959	5,793	1,261,169	1,336,528	73,270	51,317	58.8	4,400,719	2,124,669	377	7	33	7.9							
1960	5,802	1,185,763	1,268,698	76,574	47,720	58.5	3,968,025	1,967,817	360	67	40	8.6								
Bessemer & Lake Erie.....	1960	203	43,150	45,186	112	1,643	61.4	196,503	128,650	14	1	1	1.1							
1959	203	20,426	20,387	314	31.4	31.4	16,483	8	6	1	1	1.1								
Central RR Co. of New Jersey.....	1960	593	101,804	103,212	4,992	3,699	64.7	287,812	153,664	59	3	2	3.1							
1959	597	106,290	107,597	5,601	3,972	62.9	310,639	161,999	61	2	4	6.0								
Chicago & Eastern Ill.....	1960	863	102,211	102,211	2,616	4,845	61.0	393,963	200,980	28	1	3	9.7							
1959	863	101,406	101,406	2,205	4,909	61.0	393,963	200,980	28	1	3	9.7								
Elgin, Joliet & Eastern.....	1960	205	53,435	54,291	1,768	60.6	153,429	85,264	41	5	2	4.2								
1959	205	30,991	31,575	1,153	62.2	91,335	48,086	33	10	1	2.3									
Pennsylvania System.....	1960	9,809	2,491,679	2,624,177	154,226	102,391	62.1	7,962,218	3,778,328	683	12	76	9.9							
1959	9,865	2,281,958	2,386,395	136,455	97,380	61.7	7,222,472	3,215,004	654	29	65	8.7								
Reading.....	1960	1,302	266,853	267,726	7,259	9,757	58.7	847,866	444,423	151	4	16	9.4							
1959	1,302	245,733	246,383	6,221	9,464	58.3	813,493	419,294	145	11	26	14.3								
Western Maryland.....	1960	84	134,792	138,554	6,691	5,905	62.0	526,828	297,058	43	1	1	2.9							
1959	844	101,873	103,531	4,039	3,874	57.9	340,976	175,586	30	3	1	2.9								
Chesapeake & Ohio.....	1960	5,060	1,147,019	1,148,575	21,079	52,534	55.4	4,777,591	2,590,920	598	42	6	6.6							
1959	5,061	1,065,342	1,067,743	19,162	49,135	55.2	4,338,997	2,372,925	578	20	41	6.4								
Norfolk & Western.....	1960	2,722	696,265	707,659	21,694	35,868	55.6	3,533,850	1,939,864	151	4	11	6.6							
1959	2,724	657,451	678,013	31,489	34,005	55.1	3,285,515	1,782,515	178	37	27	11.2								
Rich., Fred. & Potomac.....	1960	110	32,453	32,453	579	2,051	64.5	142,649	60,815	11	4	1	1.1							
1959	110	32,082	32,082	564	2,073	67.8	137,161	58,375	15	1	1	1.1								
Atlantic Coast Line.....	1960	5,563	606,663	606,663	6,992	22,763	62.4	1,696,084	803,930	108	20	2	1.5							
1959	5,602	643,332	643,332	6,653	23,983	58.8	1,853,222	858,461	115	7	2	1.6								
Central of Georgia.....	1960	1,712	165,051	165,051	1,880	6,481	63.4	500,455	244,429	31	1	1	3.1							
1959	1,712	191,863	191,863	2,157	7,583	63.2	584,890	283,441	31	1	2	5.7								
Florida East Coast.....	1960	572	65,220	65,220	2,477	54.7	200,073	75,489	50	5	3	5.2								
1959	572	83,849	83,849	2,782	53.5	229,552	88,593	48	7	12.7	7									
Gulf, Mobile & Ohio.....	1960	2,717	257,532	257,532	13,043	66.6	931,655	445,571	86	5	5	5.5								
1959	2,717	259,482	259,482	14,193	67.5	996,381	479,355	85	5	6	6.6									
Illinois Central.....	1960	6,500	970,218	970,218	25,501	42,093	59.9	3,208,684	1,491,221	173	6	62	25.7							
1959	6,500	979,382	979,382	26,219	43,904	61.9	3,267,254	1,536,136	184	29	159	42.7								
Louisville & Nashville.....	1960	5,666	911,504	912,018	15,274	35,274	59.5	2,845,937	1,392,913	173	1	1	6							
1959	5,679	855,279	856,001	13,694	33,604	61.7	2,615,268	1,302,988	163	6	3	3.6								
Seaboard Air Line.....	1960	4,134	545,344	545,344	1,652	20,434	57.5	1,658,087	754,741	136	6	4	4.2							
1959	4,135	564,748	564,748	1,352	21,805	59.2	1,705,258	793,824	134	1	6	2.9								
Southern.....	1960	6,242	838,521	838,641	10,778	36,341	65.2	2,560,768	972,515	196	3	4	2.0							
1959	6,243	855,417	855,477	8,732	40,218	66.0	2,770,039	1,317,225	196	1	4	2.0								
Chicago & North Western.....	1960	9,244	923,558	923,558	9,463	34,975	58.5	2,752,039	1,153,616	199	11	14	6.6							
1959	9,250	877,170	877,170	9,045	31,652	59.3	2,469,727	1,005,766	163	11	15	7.9								
Chicago Great Western.....	1960	1,437	140,165	140,165	273	6,912	62.7	514,376	238,926	24	3	1	1.1							
1959	1,437	138,765	138,765	273	6,907	64.9	510,411	237,762	24	3	1	1.1								
Chic., Milw., St. P. & Pac.....	1960	10,590	891,223	899,642	9,897	41,147	59.8	3,138,382	1,396,819	167	9	4	2.2							
1959	10,587	905,685	916,544	13,009	42,441	61.9	3,047,011	1,347,029	333	10	11	3.1								
Duluth, Missabe & Iron Range.....	1960	575	114,494	114,719	231	6,043	50.8	643,241	398,722	68	30	4	3.9							
1959	537	22,904	22,909	417	286	44.3	22,689	13,599	57	22	3	3.7								
Great Northern.....	1960	8,278	1,052,998	1,057,187	27,394	43,909	58.8	3,547,163	1,673,525	291	5	1	1.7							
1959	8,279	985,157	990,606	24,367	42,700	63.7	3,066,850	1,503,532	275	6	10	3.6								
Minn., St. P. & S. Ste. Marie.....	1960	4,168	369,914	370,634	535	13,528	59.1	1,018,557	466,340	91	2	2	2.2							
1959	4,169	378,630	379,097	401	13,398	58.8	1,002,108	442,593	89	8	3	3.0								
Northern Pacific.....	1960	6,510	830,095	837,685	12,292	33,948	58.8	2,519,149	1,079,598	255	10	3	3.8							
1959	6,538	881,344	889,537	10,919	37,683	61.2	2,724,577	1,190,753	243	3	1	1.2								
Spokane, Portland & Seattle.....	1960	935	139,008	139,008	1,035	6,062	72.0	400,125	185,265	31	1	1	1.8							
1959	935	149,082	149,082	1,415	6,614	73.1	452,156	221,554	56	1	1	1.8								
Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.).....	1960	12,970	2,281,297	2,398,114	23,724	96,994	63.9	7,061,197	2,811,502	690	20	37	5.0							
1959	12,996	2,535,767	2,741,041	47,312	103,980	65.7	7,262,388	2,904,919	631	39	58	27.4								
Chic., Burl. & Quincy.....	1960	8,618	1,093,424	1,091,775	24,426	44,615	60.8	3,218,996	1,373,093	144	2	53	27.4							
1959	8,617	1,078,161	1,074,393	26,955	45,721	65.7	3,094,062	1,343,493	138	9	73	33.2								
Chic., Rock I. & Pac.....	1960	7,525	951,644	953,661	1,165	36,343	61.1	2,819,316	1,228,840	198	8	39	3.9							
1959	7,																			

# For the Month of August 1960 Compared with August 1959

Region, Road and Year	Freight cars on line			Per Cent B.O.	G.T.m. per train-hr. excl. locos and tenders	G.T.m. per train-mi. excl. locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per 'd car-mile	Net ton-mi. per car-day	Cars-miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Miles per loco. per day		
	Home	Foreign	Total												
New Eng. Region	Boston & Maine.....	1960	2,264	6,956	9,220	3.4	38,056	2,461	1,020	30.2	782	42.0	4,454	15.5	86.3
		1959	2,077	7,620	9,697	4.0	38,089	2,499	1,029	28.6	721	39.9	4,316	15.3	69.6
	N. Y., N. H. & Hartfd.....	1960	3,793	12,541	16,334	8.0	38,082	2,509	1,008	27.3	440	25.9	4,246	15.2	133.0
		1959	3,420	12,688	16,108	7.5	37,336	2,452	1,002	26.7	491	28.4	4,389	15.2	131.0
Great Lakes Region	Delaware & Hudson.....	1960	5,456	3,875	9,331	11.6	59,782	3,255	1,635	36.3	885	38.5	10,606	18.5	118.7
		1959	5,802	4,044	9,846	10.5	62,551	3,704	1,835	34.9	825	36.5	10,444	17.0	122.4
	Del., Lack. & Western.....	1960	5,247	7,406	12,653	12.8	53,215	2,953	1,224	29.3	661	35.4	8,921	18.3	136.5
		1959	6,381	7,147	13,528	12.4	51,551	3,018	1,236	28.0	612	33.9	8,839	17.3	127.9
Central Eastern Region	Erie.....	1960	10,862	13,909	24,771	12.4	69,516	3,343	1,300	24.8	855	50.9	9,383	21.0	105.8
		1959	12,846	11,285	24,131	8.2	59,424	3,292	1,423	23.4	806	50.7	9,927	21.3	105.7
	Grand Trunk Western.....	1960	5,756	5,211	10,967	7.1	48,683	2,065	825	30.3	411	5.1	5,132	23.7	134.2
		1959	5,795	7,393	13,188	5.9	49,362	2,158	856	29.1	387	23.0	5,582	22.9	94.4
Pocahontas Region	Lehigh Valley.....	1960	6,628	7,582	14,210	17.6	60,715	3,039	1,390	31.9	560	27.1	7,133	20.1	191.1
		1959	6,074	7,186	13,260	11.3	64,224	3,089	1,398	30.9	628	31.1	7,298	21.0	196.6
	New York Central.....	1960	64,997	72,440	137,437	10.4	58,515	3,357	1,457	34.8	653	32.4	8,413	17.6	148.6
		1959	69,249	63,463	132,712	8.1	56,591	3,250	1,344	31.7	590	32.0	7,331	17.6	142.6
Southern Region	New York, Chic. & St. L.....	1960	10,760	14,344	25,104	12.3	59,217	3,324	1,453	32.9	1,079	53.5	12,389	18.1	160.9
		1959	12,155	10,134	22,289	15.8	58,540	3,173	1,312	29.3	950	52.2	9,930	18.6	134.1
	Pitts. & Lake Erie.....	1960	8,660	4,003	12,663	8.5	68,771	4,370	2,658	58.1	298	8.0	16,555	15.8	81.9
		1959	9,573	1,767	11,340	5.9	75,971	4,318	2,247	53.0	165	6.3	7,420	17.7	34.2
Central Eastern Region	Wabash.....	1960	7,348	9,543	16,891	11.4	81,911	3,487	1,430	29.6	947	51.7	7,185	23.6	112.4
		1959	9,997	6,552	16,549	10.5	69,420	3,231	1,298	27.9	997	56.4	6,935	21.6	119.0
	Baltimore & Ohio.....	1960	64,331	31,116	95,447	22.2	57,010	3,548	1,713	41.4	730	30.0	11,831	16.3	109.5
		1959	70,552	28,163	98,715	20.8	53,897	3,393	1,597	39.1	620	27.1	10,385	16.1	95.5
Central Eastern Region	Bessemer & Lake Erie.....	1960	5,619	1,849	7,468	6.8	56,193	2,537	3,429	78.3	621	12.9	20,443	51.4	129.3
		1959	8,493	1,065	9,558	5.4	28,039	1,713	889	52.5	57	2.1	2,619	18.9	57.4
	Central RR Co. of New Jersey.....	1960	4,139	8,870	13,009	19.9	42,022	2,941	1,570	41.5	370	13.8	8,359	14.9	80.1
		1959	4,274	8,947	13,221	18.5	42,362	3,048	1,590	40.8	394	15.4	8,753	14.5	77.6
Central Eastern Region	Chicago & Eastern Ill.....	1960	3,080	2,698	5,778	17.4	69,056	3,898	1,988	41.5	1,140	45.1	7,512	17.9	112.0
		1959	3,775	2,528	6,303	21.5	71,725	3,909	1,969	40.1	971	39.1	7,365	18.6	133.6
	Elgin, Joliet & Eastern.....	1960	7,650	5,709	13,359	5.6	24,545	2,985	1,659	48.2	209	7.2	13,417	8.5	50.2
		1959	9,008	2,460	11,468	3.7	20,433	3,045	1,601	41.7	132	5.1	7,567	6.9	26.7
Central Eastern Region	Pennsylvania System.....	1960	97,376	50,948	148,324	17.8	54,997	3,292	1,562	36.9	707	30.8	12,425	17.2	128.6
		1959	121,197	74,547	195,744	16.4	56,460	3,249	1,446	33.0	525	25.8	10,513	17.8	116.1
	Reading.....	1960	14,105	17,381	31,486	12.1	49,539	3,177	1,665	45.5	489	18.3	11,011	15.6	71.9
		1959	20,145	12,361	32,506	20.5	52,308	3,310	1,706	44.3	404	15.6	10,388	15.8	56.1
Central Eastern Region	Western Maryland.....	1960	7,280	3,747	11,027	8.7	55,720	3,981	2,245	50.3	870	27.9	11,394	14.3	122.7
		1959	8,518	2,796	11,314	5.7	47,656	3,380	1,741	45.3	497	18.9	6,711	14.2	115.9
	Chesapeake & Ohio.....	1960	66,069	23,369	89,438	7.3	68,643	4,185	2,270	49.3	928	34.0	16,517	16.5	64.4
		1959	65,975	19,168	85,143	6.4	76,004	4,093	2,238	48.3	799	30.0	15,125	18.7	59.9
Central Eastern Region	Norfolk & Western.....	1960	53,904	6,747	60,651	2.2	85,952	5,172	2,839	54.1	1,034	34.4	22,989	16.9	156.0
		1959	57,436	10,158	67,594	3.6	88,920	5,075	2,753	52.4	858	29.7	21,106	17.8	109.5
	Rich., Fred. & Potomac.....	1960	154	1,219	1,373	2.3	89,604	4,407	1,879	29.7	1,457	76.2	17,834	20.4	76.1
		1959	110	1,047	1,157	2.6	91,016	4,283	1,823	28.2	1,632	85.5	17,119	21.3	74.4
Southern Region	Atlantic Coast Line.....	1960	19,508	16,260	35,768	4.7	46,038	2,800	1,327	35.3	737	33.4	4,662	16.5	172.6
		1959	19,259	17,081	36,340	4.5	49,225	2,888	1,338	35.8	767	36.5	4,943	17.1	188.3
	Central of Georgia.....	1960	3,993	4,569	8,562	5.2	53,450	3,039	1,484	37.7	918	38.4	4,606	17.6	182.0
		1959	3,559	5,673	9,232	4.3	52,979	3,051	1,489	37.6	1,009	42.4	5,378	17.4	193.0
Southern Region	Florida East Coast.....	1960	748	2,417	3,165	.7	50,716	3,068	1,157	30.5	779	46.8	4,257	16.5	40.0
		1959	589	2,478	3,067	.6	51,853	2,738	1,057	31.8	906	53.2	4,996	18.9	54.2
	Gulf, Mobile & Ohio.....	1960	7,189	8,992	16,181	7.1	71,081	3,619	1,731	34.2	883	38.8	5,290	19.5	99.3
		1959	6,896	9,607	16,503	5.4	74,446	3,842	1,848	33.8	936	41.1	5,691	19.4	99.6
Southern Region	Illinois Central.....	1960	25,912	22,589	48,501	2.9	60,967	3,328	1,547	35.4	982	46.3	7,401	18.4	145.1
		1959	25,913	22,651	48,564	4.7	62,077	3,358	1,579	35.0	1,044	48.2	7,624	18.6	94.1
	Louisville & Nashville.....	1960	36,667	15,956	52,623	11.1	55,685	3,128	1,531	39.3	832	35.6	7,930	17.8	191.6
		1959	35,402	15,639	51,041	9.9	54,071	3,066	1,528	38.8	822	34.4	7,401	17.7	185.0
Southern Region	Seaboard Air Line.....	1960	17,724	11,251	28,975	4.6	54,392	3,094	1,408	36.9	832	39.2	5,889	17.9	153.3
		1959	16,848	12,833	29,681	3.8	56,024	3,070	1,429	36.4	871	40.4	6,193	18.6	157.1
	Southern.....	1960	20,680	28,814	49,494	3.9	53,502	3,059	1,162	26.8	626	35.9	5,026	17.5	149.4
		1959	20,339	27,811	48,150	4.2	58,357	3,244	1,543	32.8	902	41.7	6,806	18.0	152.9
Northwestern Region	Chicago & North Western.....	1960	23,128	28,971	52,099	8.2	48,805	3,002	1,259	33.0	703	36.5	4,026	16.4	161.3
		1959	23,297	25,347	48,644	5.5	53,353	2,828	1,152	31.8	670	35.3	3,507	18.9	163.1
	Chicago Great Western.....	1960	2,086	4,342	6,428	3.8	66,311	3,671	1,705	34.6	1,191	55.0	5,363	18.1	182.5
		1959	2,305	4,124	6,429	3.5	67,645	3,680	1,714	34.0	1,167	53.5	5,337	18.4	179.0
Northwestern Region	Chic., Milw., St. P. & Pac.....	1960	29,760	26,359	56,119	5.8	68,485	3,532	1,572	33.9	808	39.8	4,255	19.4	179.5
		1959	30,594	25,375	55,969	4.5	67,563	3,370	1,490	31.7	784	39.9	4,104	20.1	92.7
	Duluth, Missabe & Iron Range.....	1960	13,231	941	14,172	7.1	67,563	3,414	1,611	38.1	1,085	48.4	6,521	19.2	130.6
		1959	13,872	879	14,751	1.8	18,064	1,046	375	42.9	36	1.5	788	18.2	10.6
Northwestern Region	Great Northern.....	1960	26,382	29,584	55,966	2.6	64,637	3,414	1,611	38.1	1,085	48.4	6,521	19.2	130.6
		1959	26,289	22,912	49,201	3.2	66,069	3,287	1,541	35.2	981	43.7	8,588	20.3	122.5
	Minn., St. P. & S. Ste. Marie.....	1960	7,131	7,838	14,969	8.3	51,567	2,760	1,264	34.5	1,050	51.6	3,609	18.7	140.1
		1959	7,075	7,667	14,742	4.5	52,756	2,665	1,177	33.0	952	49.0	3,425	19.9	132.3
Northwestern Region	Northern Pacific.....	1960	19,870	20,407	40,277	3.2	62,237	3,039	1,302	31.8	927	49.6	5,350	20.5	110.3





### ACF Markets Cushioned Auto Racks

Cushioned racks for transporting new automobiles on ACF 85-ft flat cars have been ordered by seven railroad customers and a car-leasing company. More than 250 racks have been delivered, or are in production at the ACF plant at Berwick, Pa. "Tri-level" model is designed to carry either 12 standard or 15 compact automobiles in three tiers. A "bi-level" variation, designed for 8 standard or 10 compacts, also is produced. Tri-level rack can be adjusted to accommodate the varying

heights of different automobiles. It can be installed or demounted in the field. A flat car can quickly be converted for conventional piggyback. Cushioning is provided through a chevron and helical spring cushioning unit located on the center sill and employing the same principle developed by ACF for its retractable trailer hitch. Over-all length of rack is 84 ft 9 in.; width, 8 ft 9 in., and normal loaded height for the tri-level transporter, 18 ft 6 in. Weight of the tri-level unit is 30,000 lb.

## Dynamic Pricing Policies Urged

► **The Story at a Glance:** Key industrial traffic men joined railroad rate research specialists last week in a searching analysis and evaluation of rail pricing policies. A Railway Systems and Management Association conference on Rate Research provided the forum that gave interested traffic men the rare opportunity to hear representatives of the four territorial rate associations detail their accomplishments and discuss current activities and objectives. Prominent industrial traffic managers offered critical evaluation of rail pricing policies.

While last week's RSMA Rate Research conference indicated general agreement that rate associations have worked to the mutual advantage of carriers and shippers, industrial critics warned common carriers to "forget the past" and embark on dynamic, imaginative pricing policies that will make a "real contribution to reducing manu-

facturing and distribution costs."

Keynoting the Chicago conference, L. Edward Galaspie, director of traffic, Reynolds Metals Co., criticized rail management for covering up "managerial deficiencies" by raising freight rates "instead of improving service and adopting a more realistic attitude towards pricing."

He admitted that some "over-regulation in the form of hand-me-downs from the days of monopoly" still plagues the railroads, but declared that many of today's problems result from "monopolistic thinking and a refusal to admit that competitive transportation is here to stay."

Mr. Galaspie, expressing alarm at the growth of private carriage to the detriment of common carriage, said the "negative approach" of "too many top officials in rate departments of carriers" who "must run the gamut of criticism and hard selling to convince their superiors and connecting carriers

that a particular course of action should be taken" even after they "have come to a conclusion that would benefit their company" is reason enough for many shippers to resort to private transportation.

New and novel ideas of rate making "within the framework of the law as it is written today" should be permitted, he declared, if they "generate more traffic and contribute to carrier profits."

To recapture traffic that has gone to private transportation, Mr. Galaspie advised railroads to "form a team of well-informed individuals" to analyze shipper needs, problems and costs to determine a necessary course of action and then "proceed without delay" to establish needed remedies.

To regain traffic lost to competing modes of common carrier transportation, he suggested that railroads:

- Provide door-to-door service as required.
- Maintain realistic, dependable schedules.
- Eliminate requirements for long-haul routes where connections provide faster service.
- Provide for more reciprocal switching arrangements.
- Provide equipment suitable to shippers' needs.
- Eliminate terminal and interchange delays.

In addition to service improvements, Mr. Galaspie called for realistic pricing policies, advising railroad rate men to:

- Reduce commodity classifications.
- Modify restrictive rules on packing and loading.
- Eliminate over-use of Fourth Section applications.
- Expedite handling of rate proposals.
- Maintain more contact between qualified rate department personnel and shippers.
- Develop more sympathetic attitudes toward shipper proposals.

Representing the territorial rate research associations at the RSMA conference were Dr. J. E. McGrath, chairman, Research Committee, Transcontinental Railroads-Western Traffic Association; Dr. Paul H. Banner, chairman, Research Committee, Southwestern-Western Trunk Line Railroads; Donald A. Neumann, associate member, Research Committee, Mountain-Pacific Railroads; John C. McMichael, chairman, Commercial Research Department; and Dr. Robert T. Smith, assistant director, Commercial Research, Traffic Executive Association, Eastern Railroads.

Typical of the discussion of rate association activities and problems were the remarks of Dr. McGrath of  
(Continued on page 35)



# New Products Report

## Computer Inquirer

An electronic inquiry station will display clearly readable alphanumeric characters after converting them from digital signals provided by computer, punched cards, paper or magnetic tapes. The Videograph display console can initiate an inquiry through an integral keyboard, a Flexowriter, a punched card reader or other standard forms of digital interrogation. *A. B. Dick Co., Dept. RA, 5700 West Touhy Ave., Chicago 48, Ill.*

## Optical Reader

The 1418 optical character reader reads data printed in widely used type styles on paper or card documents, at a rate of 480 characters per second. As many as 400 documents a minute may be read. The printed data is automatically translated into machine language for direct input to an IBM 1401 computer. Forms can be from 5½ in. to 8¼ in. wide by 2¾ in. to 3¾ in. *IBM, Data Processing Div., Dept. RA, 112 E. Post Road, White Plains, N. Y.*

## Optical Card Scanner

The optical scanning punch reads handwritten markings on a standard 90-column punched card. It punches the appropriate code holes into the same card at the rate of 150 cards per minute. Any soft lead pencil will do. The optical scanner reads actual numerals as well as normal pencilled notations such as check marks, lines, X-marks and circles. *Remington Rand, Dept. RA, 315 Park Ave. South, New York 10, N.Y.*

## Printer Tubes

Four new electrostatic printer tubes can translate electronic signals into printed words and pictures on paper at the rate of 20,000 characters per second. The new tubes can print up to three 8½ by 11 in. sheets every second. This high-speed printing, which includes photographs, can be sent over telephone and telegraph lines and radio channels. *Industrial Components Division, Raytheon Co., Dept. RA, 55 Chapel St., Newton, Mass.*

## Data Transmission

A new electronic system transmits data over regular telephone lines at 1,500 words per minute or 150 characters per second. The Dial-o-verter system reads or writes data via punched tape, punched cards or magnetic tape. It can transmit data in one medium at one point, and have it received in another medium at the other point. It operates with the Bell System Data-Phone. *Digitronics Corp., Dept. RA, Albertson Ave., Albertson, L.I., N.Y.*

## Solid-State Computer

The 315 computer can handle from 1 to 8 magnetic tape files each capable of storing 21 million alphanumeric characters. Input may include up to 4 magnetic character sorter-readers, punched card reader, paper tape reader and console as well as magnetic tape units. Output may include up to 4 high-speed printers and card punches, plus paper tape punch, console and magnetic tape units. *National Cash Register Co., Dept. RA, Dayton 9, Ohio.*

## Data Display Unit

An electronic unit provides a display and control link between the human operator and high speed data processing or communications systems. The Datacom accepts digital information at line speed, automatically translates it to ordinary alphanumeric characters and presents it on a cathode-ray tube screen. As the information is displayed, the operator may approve its contents, or he may alter it in part or in total by striking a standard typewriter keyboard. Incoming and outgoing records are held in the display until the operator punches the send button, causing the unit to retranslate the information to coded form and transmit it automatically to the communications network or computer.

Datacom handle 3,600 characters per second. The operator can perform selective monitoring, correcting, editing or re-routing of data. He may compose, transmit, receive, correct and expand incoming messages, or send messages composed from prerecorded internally stored forms. *Electrodata Corp., Dept. RA, Beverly Hills, Calif.*

## New Laminating Process

A plastic film provides a new method of laminating papers, letters, cards, charts, photographs, and other written or printed documents on "Thermo-Fax" copying machines. Originals and sheets inserted in the copying machines emerge a few seconds later completely bonded with a tough, transparent seal that resists moisture, liquids, and grease. *Minnesota Mining & Manufacturing Co., Dept. SO-138-RA, 900 Bush Ave., St. Paul 6, Minn.*

## Computer Family

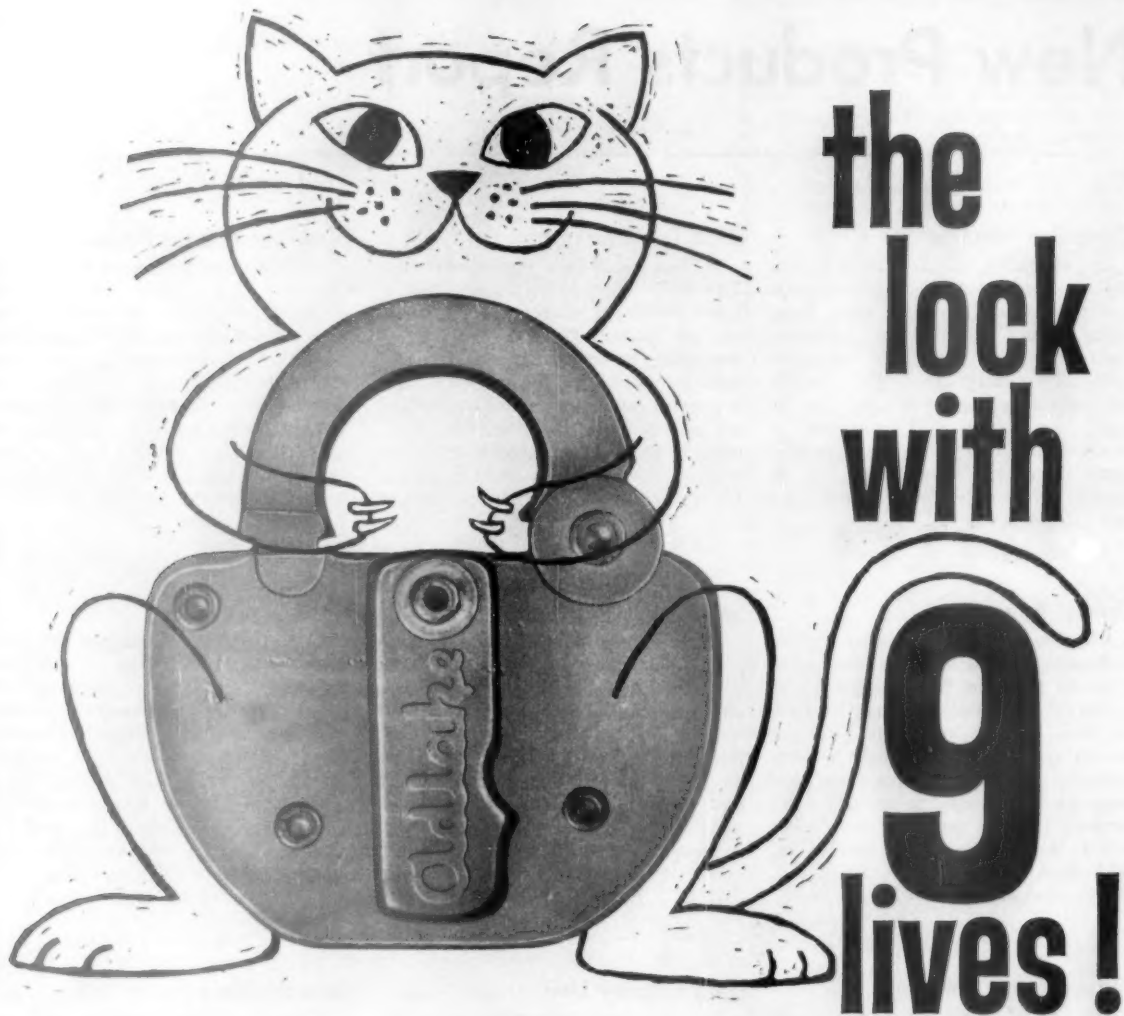
The IBM-1410 augments the 1401 to form the 1400 series of solid-state computers which share many of the same building block units, including new disk storage and input-output devices. The 1410 and the 1401 are each available in four basic models: card, tape, RMAC, and RMAC-tape. The 1410 has about 2½ times the speed and memory capacity of the 1401. *IBM Data Processing Division, Dept. RA, 112 E. Post Road, White Plains, N. Y.*

## Intercoupling Equipment

New intercouplers provide direct machine-to-machine connection between IBM card punches and standard model 28 Teletype senders and receivers. The intercoupler permits transmission of punch card data over teletypewriter with local page copies at the sending point. On the receiving end, the intercoupler provides punch cards and Teletype page copies. *Systematics, Division of General Instrument Corp., Dept. RA, Hawthorne, Calif.*

## Visual Magnetic Board

A visual magnetic control board can hold small permanent magnets of various colors and sizes to represent pick-up and delivery trucks, railroad radio equipment or m/w gangs to show their locations or work schedules. The magnetic control board, 24 in. by 36 in., also available in other sizes, can hold magnetic card holders, colored tapes, bars, etc., for visual indications. *Methods Research Corp., Dept. RA, 105 Willow Ave., Staten Island 5, N.Y.*



A long, long life is carefully built into each Adlake Model 48 switch lock—now the standard on most of America's leading railroads. Heavy steel cases, springs and shackles resist abuse . . . are treated against corrosion. Heavy duty springs refuse to "set". . . lock keeps its powerful grip and A+ dependability. Shackle is held front and back by special locking arrangement. Interlocking tumblers make it impossible to open switch lock without proper key. Lock can be furnished with case and shackle made of brass. For full information on Adlake switch locks, as well as other specialty and hardware items, write or call The Adams & Westlake Company, or the offices listed below.

#### THE ADAMS & WESTLAKE COMPANY

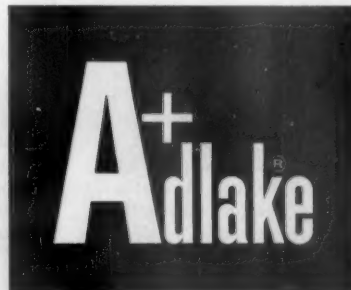
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# MARKET OUTLOOK *at a glance*

## Carloadings Drop 16.9% Below Previous Week's

Loadings of revenue freight in the holiday week ended Nov. 26 totaled 471,400 cars, the Association of American Railroads announced on Dec. 1. This was a decrease of 95,899 cars, or 16.9%, compared with the previous week; a decrease of 102,829 cars, or 17.9%, compared with the corresponding week last year; and a decrease of 68,089 cars, or 12.6%, compared with the equivalent 1958 week.

Loadings of revenue freight for the week ended Nov. 19 totaled 567,299 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS For the week ended Saturday, Nov. 19			
District	1960	1959	1958
Eastern .....	82,284	90,832	93,433
Allegheny .....	93,965	114,673	113,928
Poconchos .....	46,568	53,536	54,079
Southern .....	111,926	121,317	118,414
Northwestern .....	62,713	78,885	66,201
Central Western .....	121,104	121,417	124,492
Southwestern .....	48,739	49,235	49,207
Total Western Districts .....	232,556	249,537	239,900
Total All Roads .....	567,299	629,895	619,734
Commodities:			
Grain and grain products .....	67,911	53,785	52,937
Livestock .....	6,072	7,035	6,198
Coal .....	102,402	124,532	122,175
Coke .....	5,879	8,277	8,794
Forest Products .....	34,658	40,484	37,581
Ore .....	20,423	42,370	27,772
Merchandise (c.l.) .....	32,721	39,588	44,287
Miscellaneous .....	297,233	313,824	320,010
Nov. 19 .....	567,299	629,895	619,734
Nov. 12 .....	564,590	638,333	644,531
Nov. 5 .....	599,493	561,223	658,442
Oct. 29 .....	620,712	587,776	674,991
Oct. 22 .....	637,311	607,517	674,845
Cumulative total, 46 weeks .....	27,567,237	27,579,794	27,026,905

## PIGGYBACK CARLOADINGS.—

U. S. piggyback loadings for the week ended Nov. 19 totaled 11,174 cars, compared with 8,906 for the corresponding 1959 week. Loadings for 1960 up to Nov. 19 totaled 495,860 cars, compared with 370,083 for the corresponding period of 1959.

**IN CANADA.**—Carloadings for the seven-day period ended Nov. 14 totaled 64,515 cars, compared with 69,715 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Nov. 14, 1960 .....	64,515	25,382
Nov. 14, 1959 .....	77,551	27,437
Cumulative Totals		
Nov. 14, 1960 .....	3,224,350	1,220,288
Nov. 14, 1959 .....	3,408,962	1,230,229

## New Equipment

### FREIGHT-TRAIN CARS

► **Detroit, Toledo and Ironton.**—Ordered for immediate delivery 100 50-ton, 50-ft 6-in. box cars from Pullman-Standard at an estimated cost of \$1,250,000.

► **Milwaukee.**—1961 improvements budget, totaling approximately \$25,000,000, includes \$7,500,000 for purchase of 750 50-ton, 40-ft box cars equipped with roller bearings and 9-ft doors; and \$3,240,000 for improvements to existing freight and passenger equipment.

► **North American Car.**—Ordered 35 3,500-cu ft capacity covered hopper cars from Thrall for lease to United Carbon Co., Houston, Tex.

► **Northern Pacific.**—Ordered five 70-ton, 3,500-cu ft Dry-Flo covered hopper cars from General American for delivery in early December.

► **Western Pacific.**—Ordered 50 70-ton, 56-ft flat cars from Thrall. Delivery of the \$500,000 order will be completed this month.

## New Facilities

► **Norfolk & Western.**—Will expand its coal shipping facilities at Lamberts Point, Norfolk, Va., with construction of a new \$19,000,000 pier. The new conveyor-fed pier, which will be 1,308 ft long and 83 ft wide, will bring N&W's Lamberts Point coal dumping capacity to some 1,800 cars a day in peak periods.

► **Toronto Transit Commission.**—Awarded a \$978,751 contract to General Railway Signal Co. of Canada covering a signal system for the University Section of the Bloor-Danforth-University Subway.

## Purchases & Inventories

► **Eight Months' Purchases Up 3.9%.**—Purchases by domestic railroads of fuel, material and supplies in this year's first eight months were \$39,340,000, or 3.9%, higher than in the comparable 1959 period. Purchase and inventory estimates in following tables were prepared by Railway Age.

### PURCHASES\*

	August 1960 (000)	Eight Months 1960 (000)	Eight Months 1959 (000)
Rail .....	\$ 3,011	\$ 48,081	\$ 54,439
Crossties .....	5,763	44,109	30,321
Other Materials .....	88,491	727,222	660,301
Fuel .....	30,178	233,255	268,266
Total .....	\$127,443	\$1,052,667	\$1,013,327

\*Subject to revision.

### INVENTORIES\*†

	August 1, 1960 (000)	August 1, 1959 (000)
Rail .....	\$ 61,179	\$ 63,402
Crossties .....	74,991	70,880
Other Material .....	419,614	426,145
Scrap .....	23,695	25,894
Fuel .....	20,210	20,810
Total .....	\$599,689	\$607,131

\*Subject to revision.

†All total inventory figures taken from ICC statement M-125 for month indicated.



# C&NW Hits Subsidized Transit

► The Story at a Glance: Chicago & North Western has, in effect, called for a policy showdown to determine whether privately-owned rail carriers are to survive in the Chicago mass transportation market.

North Western is alarmed by the threat of new or increased competition from publicly-supported mass transit on all three of its suburban routes. And, as Chairman Ben W. Heineman sees it, there are but two choices: Either the railroad will be permitted to continue operating and improving its service without further competitive inroads by the Chicago Transit Authority; or C&NW will get out of the suburban business. The railroad, Mr. Heineman declared last week, "is prepared to sell its entire suburban service to the CTA or any other public body, here and now, if that is the wish of the legislature and the public."

Everywhere the North Western looks, it sees the crushing weight of subsidized competition threatening to make mockery of the railroad's five-year, \$40-million investment to create "the finest suburban train service in the world."

On the Galena Division (west), there may be new efforts to pump public funds into the electrified Chicago, Aurora & Elgin, which quit running three years ago. The governor-elect of Illinois has been quoted as foreseeing the possibility of a CTA-CA&E consolidation, using the CTA tracks in the median strip of the Congress Expressway (RA, Nov. 21, p. 13). On the Wisconsin Division (northwest), CTA wants to build a \$39-million rapid transit line in the median strip of the new Northwest Expressway, paralleling C&NW tracks. And on the Milwaukee Division (north), where CTA and C&NW are already parallel through two suburban communities, CTA reportedly wants to create additional parking area as an attraction for L-train riders.

Expressways, per se, don't particularly worry North Western. "If we are permitted relative freedom to experiment in service innovations and in making operating and service and rate adjustments," Mr. Heineman noted, "North Western believes it will be able to compete effectively with the private automobile with a first class service in private ownership, without public subsidy."

But, he added quickly, "we are alarmed by another competitor. We are no match for it. There is little, if any, defense against it. It appears in various forms and disguises from time to time.

"I refer, of course, to the competition of mass transportation created with public funds."

Mr. Heineman's basic thesis: "Privately owned transit facilities should not be forced to compete with those supported with public funds. Obviously, the private carriers cannot and will not survive."

C&NW's chairman said his railroad is alarmed at the prospect that mass transit facilities in the Chicago area may be "headed for mass subsidies." And, he said, this prospect is developing at a time when "there is a growing belief in Chicago that essential commuter train operations can be maintained under private ownership and without the aid of public subsidies."

Chicago railroads, Mr. Heineman emphasized, "are now displaying a resourcefulness and ingenuity in suburban train operations unmatched in any major metropolitan area."

But the North Western, he said, faces just two alternatives: Either it will be permitted to continue operating without new competition from CTA "which could not justify such inroads without the aid of public funds;" or it will get out of the suburban business and sell its entire service to CTA or some other public body.

Mr. Heineman said North Western is prepared to negotiate the sale of its three main lines, including roadbed, tracks, signals, stations and other facilities. The offer, he said, also covers the road's downtown passenger terminal and terminal facilities, five outlying coach yards and "any other property used exclusively in suburban train operations."

Under a sale agreement, Mr. Heineman added, C&NW would lease back a single track or two for intercity passenger trains and freight operations.

"The price will be reasonable," he concluded. "No reasonable offer will be refused."

Backing for North Western's position came quickly. Chicago commuter lines, AWR President Clair M. Roddewig indicated, "strongly support" Mr. Heineman's position.

Both Mr. Heineman and Mr. Roddewig lashed out at the waste which would be involved in building new rail facilities to compete with "a privately-owned and -operated railroad which is presently rendering a satisfactory public service."

Until North Western's modernized service can no longer handle the available commuter traffic, Mr. Roddewig commented, "there seems to be no need

for the building of a \$39-million rail line with public funds in the median strip of the new [Northwest] Expressway. With its almost-completed \$40-million commuter service modernization program, the North Western is in position to provide commuters with the best suburban train service in the country. Any duplication of service by a rail line built with public funds would be only an unnecessary and costly facility."

The two railroad officers agreed that Chicago needs good mass transportation service more than ever, as the population of the metropolitan area expands. But, Mr. Heineman declared, "the urgency of our mass transportation problem suggests the close coordination of the public and private facilities we now have, and the extension and improvement of both."

C&NW's chairman also noted the possibility of increased coordination of present and proposed CTA routes with

(Continued on page 35)



## Up and Over

Land-sea transfer by helicopter of a truck-body size freight container got a public showing at New York Nov. 22. Traffic and military officers and press watched a Sikorsky S-60 "Skyerane" shuttle a Strick container between New York Central piggyback yards and a U.S. Lines freighter in the Hudson river.





Robert A. Wyman  
CNR



Harry G. Wortman  
CNR



Anthony V. Miller  
Reading



Elbert T. DeWitt  
Reading



Richard H. Henry  
Spray



William M. Adrian  
Mink-Dayton

## People in the News

**BALTIMORE & OHIO.**—Carroll R. Bennett, assistant general freight agent—sales and service, appointed assistant general freight agent—system, Baltimore, succeeding Charles E. Windisch, who replaced retiring John A. Martin as general freight agent, rates-system (RA, Oct. 10, p. 38).

**CANADIAN NATIONAL.**—James J. Behan, manager and general superintendent, British Columbia district, Vancouver, will become the first manager of the British Columbia area on Jan. 1, when the CNR's reorganization plans take effect. Robert A. Wyman, superintendent, Regina, Sask., will be transferred to Vancouver for special duties on Jan. 1 and will succeed Mr. Behan on March 1 when the latter retires after 50 years of railway service. Harry G. Wortman, general freight agent, Winnipeg, Man., will become assistant manager, British Columbia area, at Prince George, in charge of sales and service, effective Jan. 1.

John Henry Powell, storekeeper, Moncton roundhouse, promoted to storekeeper at Moncton Yard's new diesel shop. J. O. Melanson, storekeeper, Moncton yard, while the facility was under construction, named storekeeper of the new freight car repair shop.

Robert B. Thomas, special representative, department of research and development at New York, with United States jurisdiction, appointed the Atlantic region's first manager of industrial development.

R. Earle Warman, general yardmaster, Moncton, and James G. Bruce, operation trainee, Maritime district, named trainmasters at the new \$15 million automatic classification freight yard at Moncton.

**INTERSTATE COMMERCE COMMISSION.**—Edward Burns, assistant director, Bureau of Transport Economics and Statistics, and Aubrey T. Palmer, attorney-adviser, Bureau of Rates and Practices, have retired.

**MILWAUKEE.**—Harry A. Sauter, division freight and passenger agent, Terre Haute, Ind., appointed foreign freight agent, Chicago.

**MISSOURI PACIFIC.**—Glee C. Smith, assistant traffic manager, Los Angeles, retires Dec. 10.

**NEW YORK CENTRAL.**—Following a program of rotation and development planned for management of the NYC, William T. Alexander, Jr., general manager, Western district, Cleveland, Ohio, transferred to the Eastern district, Syracuse, N.Y., succeeding Robert D. Timpony, who has taken over Mr. Alexander's former position. E. L. Keller, assistant transportation superintendent, Toledo (Ohio) terminals, appointed terminal superintendent, Frontier Yard, Buffalo, N.Y.

intendant, Frontier Yard, Buffalo, N.Y.

**NICKEL PLATE.**—A. E. Haidenreich, assistant general storekeeper, promoted to general storekeeper, Lima, Ohio, succeeding M. B. Bowman, retired.

**PENNSYLVANIA.**—William M. Hardt II, who has been on special assignment, has returned to his former position as manager-freight sales and services, Northwestern Region, Chicago, replacing Charles A. Fritzson, transferred to the New York Region.

**REA EXPRESS.**—Donald J. Bowersox, a private business consultant in the field of marketing and distribution, has been appointed assistant director, business development of REA Express at New York.

Jerry E. Nolan, superintendent, security division, New York, named director of that division.

**READING.**—Anthony V. Miller, assistant to vice president—operations and maintenance, Philadelphia, Pa., named superintendent of transportation there, succeeding Ralph C. Klein, retired. Elbert T. DeWitt, transportation assistant, Reading, Pa., succeeds Mr. Miller.

**RICHMOND, FREDERICKSBURG & POTOMAC.**—Elmer Garner appointed assistant master mechanic, maintenance of equipment department, Potomac Yard, Alexandria, Va. Mr. Garner was formerly with the Bureau of Safety and Service, Interstate Commerce Commission, Washington, D. C.

**TORONTO, HAMILTON & BUFFALO.**—M. Barnhoorn appointed car accountant, Hamilton, Ont., Can., succeeding J. R. Van Every, retired. J. D. Cockburn named trainmaster and road foreman of engines. A. P. Quinton, trainmaster, has retired. J. G. Boldham, safety agent, appointed to the dual position of assistant trainmaster and safety agent.

**TRANSPORTATION ASSN. OF AMERICA.**—G. R. Wilson, Jr., named director of information and publications, Washington, D. C., succeeding Leif Gilstad, who retired Oct. 31, but will be retained as a consultant in connection with the TAA's educational program. Mr. Wilson was formerly with the public relations department of the National Coal Policy Conference.

**WABASH.**—W. D. Steele, vice president, formerly vice president, secretary and treasurer, New York, retired Nov. 1. C. B. Deibel has replaced Mr. Steele as vice president, secretary and treasurer, with headquarters at St. Louis (RA, July 18, p. 45).

A. T. Scherer and H. L. Wingfield named master mechanics, Montpelier, Ohio, and Owosso, Mich., respectively. W. C. Hall appointed assistant master mechanic, Moberly, Mo. W. G. Sears appointed wage supervisor, and H. C. Storey named general foreman, car shops, both at Decatur, Ill. W. D. Lafferty appointed general car and locomotive foreman, Chicago.

The following appointed district sales manager, Wabash-Ann Arbor: W. C. Albrecht, Atlanta; E. W. Nappier, Decatur, Ill.; L. D. Miller, Houston; B. H. Thomas, Peoria, Ill.; R. W. Cowles, Salt Lake City; L. H. Willson, Seattle. R. H. Staley named division sales manager, Omaha. The following sales representatives named: D. H. Broich and H. J. Hill, Des Moines; D. B. Durham, Indianapolis; D. A. Drumtra, Memphis; J. W. Bigger, Owosso, Mich.; T. J. Burke, Portland; R. L. Callen, Quincy, Ill.; W. A. Jacob, San Francisco, and R. M. Keever and W. R. Kolb, Seattle.

### OBITUARY

Thomas I. Conway, 54, vice president—service supervisor, Journal Box Servicing Corp., died Nov. 10 at Chattanooga, Tenn.

James P. Dervin, 77, who retired in 1950 as freight traffic manager, New York Central, died Nov. 28 in Lawrence Hospital, Bronxville, N.Y., after a long illness. From 1952 to 1955 Mr. Dervin served as traffic vice president in the New York office of the Rutland.

W. F. Kasper, retired chairman of the board and president, Fairmont Railway Motors, Inc., died Oct. 30.

John A. Sterne, 90, retired car accountant, Chicago & North Western, died Nov. 28 at Arlington Heights, Ill.

## Supply Trade

Richard H. Henry has been appointed vice president and director of export of Spray Products Corp., Camden, N.J. Mr. Henry was formerly manager of travel for the American Express Co.

William M. Adrian of Chicago, has become associated with Mink-Dayton, Inc., as vice president. Mr. Adrian has had many years of experience in designing and engineering of lighting fixtures in the transportation field.

Wine Railway Appliance Co., Division of Unitcast Corp., has appointed Robert M. Close, St. Louis Railway Supply Co., as its agent in the St. Louis, Central and Southwestern territories.

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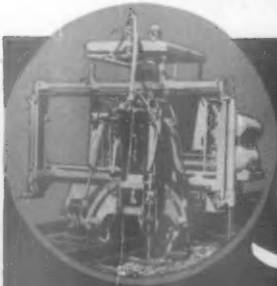
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## Letters from Readers

### Cost Finding

Washington, D. C.

To the Editor:

One paragraph of the Action Page of Railway Age for Oct. 31 contains a number of statements regarding the [Interstate Commerce] Commission's Cost Finding work, which are patently incorrect. You said, for instance, that we did not make available our cost information on barge operations.

The Cost Finding Section is now in the developmental stages of a cost formula for barge-line operations. When it is completed, it will be placed on the press table under the same procedure that has been followed for all other formulas developed by the section. Furthermore, unit costs and illustrative cost scales by weight brackets and lengths of haul resulting from an application of this formula will be published.

The next paragraph complains about the failure to furnish motor carrier cost studies each year, as is done for railroads, and the following paragraph concludes that this situation arises because "the Commission has been working on the railroads so much longer." The conclusion is not well founded. The reason for the failure to make annual cost studies for motor carriers is due solely to lack of sufficient personnel. To overcome this situation our present program calls for the publication of motor common carrier costs at a common level for all regions before the middle of 1961. We are happy that Railway Age recognizes the vital need for cost data for all modes of transportation.

C. W. Emken, Director  
Bureau of Accounts, ICC

(No personal criticism of ICC people was intended. As our Action Page insisted, there is at present a lack of adequate cost information about barge and truck operations—and if railroad people don't kick about unequal treatment in this or any other area, then continuance of this unequal treatment would be, in part, their fault. We are glad to have Mr. Emken's assurance that this inequity is in process of correction.—Editor)

### Dividends Declared

ATCHISON, TOPEKA & SANTA FE.—25¢ extra, payable Jan. 12 to holders of record Dec. 8.

MISSOURI PACIFIC.—Class A, 60¢, quarterly, payable Jan. 1, 1961, to holders of record Dec. 16.

RICHMOND, FREDERICKSBURG & POTOMAC.—common and dividend obligations, \$1, quarterly, and 75¢ extra, payable Dec. 16 to holders of record Dec. 2.

SOUTHERN PACIFIC.—28¢, quarterly, payable Dec. 19 to holders of record Dec. 1.

UNION PACIFIC.—30¢, quarterly; 40¢ extra, both payable Jan. 3 to holders of record Dec. 9.

## DYNAMIC PRICING POLICIES URGED *(Continued from page 28)*

the Chicago-based group. According to Dr. McGrath, the Transcontinental Railroads' Research Committee has conducted carload waybill studies on transcontinental traffic, exhaustive analyses of motor carrier competition and area economic development studies. His association has also aided individual railroad traffic officers and research groups in response to specific requests.

The panel indicated a distinct cleavage in responsibilities between the western and eastern associations in that rate proposal decisions, a function of the eastern group, are reserved as a legislative function of western rail traffic officers. The western associations operate in a staff advisory capacity, while the eastern railroads' Traffic Executive Association actively legislates in the light of its findings.

Traditional resistance to change, the panelists admitted, was their foremost handicap to gaining acceptance of their efforts within the industry. This "inertia problem," according to Dr. McGrath, prevented ready acceptance of research reports by "some traffic officers."

### NORTH WESTERN

*(Continued from page 32)*

suburban railroad service—with the implication of "coordinated and cooperative effort against our common overwhelming competitor—the passenger automobile."

V. E. Gunlock, chairman of the Chicago Transit Board, bounced back quickly with a denial that CTA would be competing with C&NW if the Northwest Expressway transit line is built. The railroad, he said, has closed most of its close-in stations and gets most of its patronage from points farther out on the line. Statements made by the railroad in connection with its comprehensive service revision program three years ago were cited by CTA to back up its position. Mr. Gunlock conceded that CTA would be in direct competition if it took over the CA&E. But he called that operation a losing proposition and said the authority wouldn't take it over unless provision were made for a subsidy to cover losses.

Actually, if the overall Chicago transit plan is adopted, North Western won't be the only carrier with a potential problem of private vs public competition. Provision for rapid transit rail operation has been proposed for a second expressway and special rapid transit bus lanes may be built in conjunction with still a third expressway project.

Shipper cooperation, already good, will improve "if shippers come to be aware that carrier traffic officers use and rely on our services," said Dr. McGrath.

R. M. Boyd, general traffic manager, Pittsburgh Plate Glass Co., and newly elected president of NITL, declared that the shipper has a stake in railroad rate research since the industrial traffic manager "must look beyond tariffs and consider all distribution costs" and that there is "no easy road to discover an equitable rate and satisfactory mode of transportation."

Mr. Boyd noted that the "rails' biggest competitor is private carriage," adding that "private costs" will be the criteria of moving goods at a profit.

The major point of disagreement between the railroad rate research specialists and the industrial traffic men attending the conference evolved from rail claims that they be per-

mitted to "charge what the traffic will bear" depending on specific competitive considerations and shipper demands for rates based on a "cost plus fair return" basis.

Alan White, assistant to director of pricing, REA Express, summed up the apparent differences of opinion as merely "distinctions" of approach to the same problem. He declared that in today's competitive situation, "the free-enterprise system" will govern pricing. He explained that "administration of the law does respond to competitive forces" and in the long run these forces "definitely shape and control the price structure."

Mr. Boyd, calling for continuation of territorial rate association activities, said that all groups "have a basic objective" and suggested the need for "coordination and correlation" of these activities on an industry-wide basis.

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# You Ought To Know...

**Favorable depreciation ruling** of the U.S. Tax Court in a C&NW case will be followed by the Bureau of Internal Revenue in similar cases. The court's decision, reported in 29 T.C. 989, held that a railroad which has consistently employed the retirement method of accounting for fixed property is not required to make an adjustment for pre-1913 depreciation when such property is retired. In announcing its acquiescence, BIR cautioned that this position would have no bearing on adjustments for pre-1913 depreciation which might be required when a railroad changes from retirement to another method of accounting.

**PRR is rebuilding** its Chatauqua branch between Oil City, Pa., and Brockton, N. Y., (82 miles) to handle increased traffic which will be diverted from the Salamanca line when the latter is blocked off by the Kinzua Dam flood control project. The government has allotted the PRR \$20,250,000 for the project, which will involve installation of CTC, laying of some 35 miles of heavier rail and track, banking of curves, and construction of new sidings. Completion is set for early 1964.

**Burlington Truck Lines** is acquiring Arrow Freight Lines, its equipment and operating rights, effective Dec. 5. Arrow, a common carrier of general commodities, operates over approximately 800 route miles in Nebraska.

**A majority interest** in Mobilweld, Inc., has been acquired by Poor & Co. as a "natural complement" to the other services the company offers to the railroad industry. Mobilweld is inventor and developer of a rail welding process which can be moved from site to site or operated at a fixed location.

**CB&Q has petitioned ICC** for authority to abandon a 30-mile branch line between Indianola Jct., and Indianola, Iowa, citing operating losses of approximately \$30,000 a year due to continued operation of the little-used line.

**Abandonment** of the entire 57.1-mile line of the Tallulah Falls Railway, extending from Cornelia, Ga., to Franklin, N. C., has been authorized by the ICC (RA, Sept. 7, 1959, p. 46).

**Reorganization** of the Florida East Coast, as approved by the ICC, will be put into effect under authorizations embodied in a report and order issued by the Commission's Division 4. The order authorizes the reorganized company to acquire FEC properties, and to issue securities and assume obligations as necessary to consummate the reorganization plan.

**Intercity freight** hauled by truck totaled 60,131,791 tons during the first nine months of 1960—an increase of 0.6% compared with the corresponding 1959 period, according to American Trucking Associations. Largest gains were reported by carriers in the Middle Atlantic and Rocky Mountain regions.

**New Haven is cutting** Saturday and Sunday round-trip passenger fares in half in an effort to fill lightly-patronized weekend trains. One-way fare for a round trip completed the same day will apply between any two stations on the line, on any train. The move is part of a "self-help" program triggered by the promise of tax relief in New York and Connecticut.

**Congressman Celler**, investigating the Port of New York Authority, asserted last week that the bi-state agency had successfully mustered investment banking aid in opposition to a program of N.Y. Gov. Rockefeller that would have had the port agency underwrite rail commuter equipment costs. A substitute plan passed in 1959 calls on the agency only to administer funds for commuter equipment (RA, March 23, 1959, p. 9). No cars have been built under the \$20,000,000 program.

**The ICC has reversed itself** to permit the Seafarers International Union to intervene in a rate case (No. 33479) which involves a Seatrains Lines complaint against railroads. SIU is supporting Seatrains, claiming that its members may lose their jobs unless the water carrier gets the additional joint rates and routes which it wants. SIU was allowed to enter the case when the Commission reconsidered its previous denial order (RA, Sept. 26, p. 10) and came up with a finding that the union has interest in the disposition of the case.

**Montreal Locomotive Works** is "actively preparing for the manufacture of rapid transit cars for municipalities," shareholders were told last week.

**Illinois Central will add** the Palm Grove Cafe, a diner-lounge car providing budget priced meals, to its "City of Miami" during the winter travel season. The every-other-day Chicago-Florida streamliner also features a twin-unit dining car and an observation-tavern-lounge.

**New AAR directors** are New Haven President George Alpert and C&NW Chairman Ben W. Heineman. They replace Boston & Maine President P. B. McGinnis and Milwaukee President W. J. Quinn on the 20-member board.

**An interim report** on the two-year road test program near Ottawa, Ill., will be submitted to Congress in January. Complete analysis of data—covering 17.1 million miles of driving over a 14-mile test strip—won't be ready until next autumn. The full report is expected to give the American Association of State Highway Officials bases for recommendations to state legislatures on tax schedules for highway users, weight limitations and specifications for pavement and bridges.

**After more than 60 years** of operation the Butte, Anaconda & Pacific is seeking an emblem. A contest (deadline Dec. 9) is being conducted among employees to select an appropriate insignia to be placed on BA&P locomotives and rolling stock.



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## EMPLOYMENT OPPORTUNITIES

### SECTION

Railway Age, 30 Church St., New York 7, N. Y.

# Is Ad Expense a Waste?

While some railroads are exceptional—the railroad industry in general is not noted for the magnitude of its advertising expenditures. Nevertheless, the total outlay involved is not peanuts; and any considerable expenditure needs continued and critical policing, especially when the cash in the barrel is low.

Some people seem to look on advertising as a kind of magic device—you spend your money and the favorable results automatically come out of the other end of the machine, like feeding round-steak into a meat grinder to get hamburger. Other people are more skeptical—they see advertising as an expense you magnanimously incur in good times (like gifts to the Community Welfare campaigns), but which you can't afford to continue when money is tight. Such people do not ordinarily believe that advertising does much good when employed, or that any tangible harm comes if it is discontinued.

Viewed critically at closer range, advertising quickly loses such attributes, either of magic or of nebulous uncertainty. It is like buying an automobile or a computer—if you purchase the product which meets your requirements and use it properly, you will get compensatory results. However, you can throw your money away on advertising just as certainly as you can by buying a low-slung car to travel rutty mountain roads; or by paying \$50,000 in computer rental to do a \$1,000 job of calculation.

Practically all advertising falls into two categories—"direct product" advertising and "idea" advertising. Direct product advertising is the kind a department store does when it publicizes a sale of specific articles of wearing apparel or household furniture. If the potential customer is in the market for these articles and he likes the description and the prices publicized in the advertising, he will go to the store to look the goods over. In an instance like this, one single advertisement is sufficient to induce customer response.

Most advertising, however, does not fall into the "direct product" category. Instead, it is "idea" advertising. Indeed, most advertising, even of products, is idea advertising—in that the seller does not expect one single advertisement to bring customers to his place of business prepared to purchase. Rather, with idea advertising the seller expects, by repetition, to establish a good name

for his product and his company; and to keep the customer informed of the good news about his company and product. When it is ideas and reputations you are selling, then continuity—repetition—is essential. You can't build a reputation for a product or a company on one advertisement a year; or by advertising once a week one year and not at all the next.

About the only kind of advertising a railroad can do which would be effective under the one-time direct product category would be that used to publicize a new schedule of freight rates on some commodity, or reduced excursion fares. Practically all railroad advertising—whether of passenger or freight service or of the variety known as "public relations"—falls into the idea category. This kind of advertising requires continuity—repetition—to be effective.

These observations are prompted by the announcement that the railroads' public relations advertising campaign has been suspended, at least temporarily. There are some messages this advertising has been featuring that have a vital bearing on public treatment of the railroads. Some of these messages have been steadily winning public understanding—such messages as those about the superior economy of railroad service, the unnecessary complexity of railroad regulation, the public interest in fairer tax treatment of railroads, the facts behind the problem of archaic working rules. Public interest and understanding of these matters has been growing—thanks to the publicity (including advertising) they have received. Shut off the program entirely and public interest may wane before a "sale" is made.

This paper is wholly sympathetic to the problem of budget makers these days—the publishing business is certainly not exempt from these problems. But the question we're raising is not the amount of the budget, but its distribution over the years. The heavy investment railroads have already made in bringing public opinion as far along as it is would be money out the window if this educational effort were abandoned. Our hope would be, however modest necessity may require such outlays to be, that their continuity not be completely and indefinitely interrupted.

*Season's Greetings..*




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